

=> d his ful

FILE 'REGISTRY' ENTERED AT 15:27:07 ON 19 JUL 2007

L3 STR  
L5 192 SEA SSS FUL L3  
L6 262726 SEA ABB=ON PLU=ON COPPER?/CN  
L7 118245 SEA ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA ABB=ON PLU=ON EPIGALLOCATECH?

FILE 'HCAPLUS' ENTERED AT 16:01:15 ON 19 JUL 2007

L9 14733 SEA ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LYS?  
L10 1410113 SEA ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?  
L11 5101 SEA ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
L12 1 SEA ABB=ON PLU=ON L9 AND L10 AND L11  
D STAT QUE L12  
D IBIB ABS HITSTR L12 1  
L13 7 SEA ABB=ON PLU=ON L9 AND L11  
D STAT QUE L13  
D IBIB ABS HITSTR L13 1-7  
L18 232 SEA ABB=ON PLU=ON L11 AND L10

FILE 'REGISTRY' ENTERED AT 16:03:31 ON 19 JUL 2007

L21 5 SEA ABB=ON PLU=ON SALINE/BI

FILE 'HCAPLUS' ENTERED AT 16:03:40 ON 19 JUL 2007

FILE 'REGISTRY' ENTERED AT 16:03:48 ON 19 JUL 2007

SET SMARTSELECT ON  
L22 SEL PLU=ON L21 1- CHEM : 13 TERMS  
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 16:03:49 ON 19 JUL 2007

L23 114053 SEA ABB=ON PLU=ON L22  
L24 114053 SEA ABB=ON PLU=ON L23 OR SALINE  
L25 6 SEA ABB=ON PLU=ON L18 AND L24  
L26 5 SEA ABB=ON PLU=ON L25 NOT (L12 OR L13)  
D STAT QUE L26  
D IBIB ABS HITSTR L26 1-5  
L30 58 SEA ABB=ON PLU=ON ("PATT L"/AU OR "PATT L M"/AU OR "PATT  
LEON A"/AU OR "PATT LEONARD M"/AU)  
L31 43 SEA ABB=ON PLU=ON L30 NOT (L9 OR L13 OR L26)  
D STAT QUE L31  
D IBIB ABS HITSTR L31 1-43

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 18 JUL 2007 HIGHEST RN 942651-59-4  
DICTIONARY FILE UPDATES: 18 JUL 2007 HIGHEST RN 942651-59-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

#### FILE HCAPLUS

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FILE COVERS 1907 - 19 Jul 2007 VOL 147 ISS 4  
FILE LAST UPDATED: 18 Jul 2007 (20070718/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 16:01:15 ON 19 JUL 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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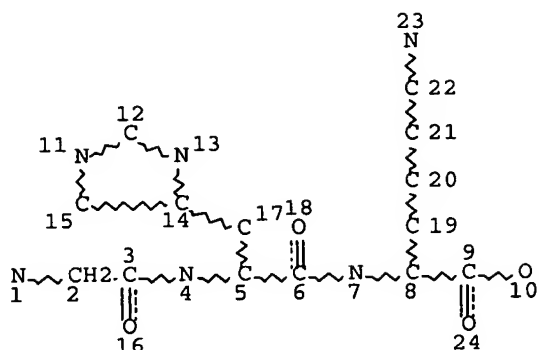
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FILE COVERS 1907 - 19 Jul 2007 VOL 147 ISS 4  
FILE LAST UPDATED: 18 Jul 2007 (20070718/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>  
=> d stat que l12  
L3 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3  
L6 262726 SEA FILE=REGISTRY ABB=ON PLU=ON COPPER?/CN  
L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
S?  
L10 1410113 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?  
L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
L12 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11

=> d ibib abs hitstr l12 1

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:142983 HCAPLUS Full-text  
DOCUMENT NUMBER: 140:187411  
TITLE: Compositions containing peptide copper  
complexes and phytochemical compounds, and methods  
related thereto  
INVENTOR(S): Patt, Leonard M.  
PATENT ASSIGNEE(S): Procyte Corporation, USA  
SOURCE: PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004014413 A1 20040219 WO 2003-US23293 20030724  
 WO 2004014413 A8 20040521

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2494156 A1 20040219 CA 2003-2494156 20030724  
 AU 2003256797 A1 20040225 AU 2003-256797 20030724  
 US 2004180102 A1 20040916 US 2003-627193 20030724  
 EP 1545579 A1 20050629 EP 2003-784817 20030724

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.:

US 2002-400318P P 20020731  
 WO 2003-US23293 W 20030724

AB Compns. having antioxidant, anti-inflammatory and/or cosmetic utility for a mammal, combining at least one peptide copper complex and at least one phytochem. compound are described. More particularly, the phytochem. compound is a polyphenol or a carotenoid, the polyphenol being a flavanoid, a flavonoid, a flavonoid derivative, a flavolignan, a polyphenolic rhizome, or their mixts. Compns. for topical application include additives such as emollients, sunscreen agents, skin protectants, skin conditioning agents, and humectants. Methods, employing such compns., are described for enhancing or restoring the resistance of a mammal to oxidative or inflammatory damage, for accelerating wound healing, for cosmetically healing mammalian skin, and for stimulating hair growth, or preventing or treating hair loss. For example, a moisturizing lotion contained water 74%, glycerin 1.0%, xanthan gum 0.50%, diisopropyl adipate 4.0%, isocetyl stearate 6.0%, octyl palmitate 10.0%, glyceryl stearate 1.0%, cetyl alc. 1.0%, stearyl alc. 0.8%, behenyl alc. 0.5%, palmitic acid 0.3%, stearic acid 0.25%, glycyl-L-histidyl-L-lysine-copper complex 0.2%, catechin 0.01%, gallocatechin 0.01%, epicatechin 0.01%, propylene glycol 0.55%, diazolidinylurea 0.03%, and iodopropynyl Bu carbonate 0.02%. The formulation is beneficial as the phytochem. compound provides anti-inflammatory action to the skin in addition to the anti-inflammatory and tissue rebuilding activity provided by the presence of the copper peptide compound

IT 970-74-1, Epigallocatechin 989-51-5,  
 Epigallocatechin gallate 7440-50-8D, Copper,  
 peptide complexes 49557-75-7D, Glycyl-L-  
 histidyl-L-lysine, derivs., copper(II)  
 complexes

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)

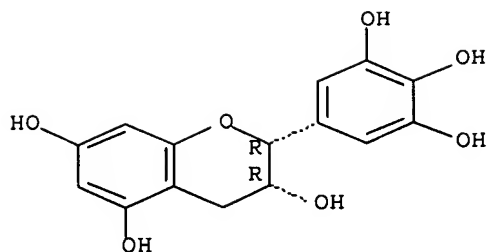
(compns. containing peptide-copper complexes and phytochem.  
 compds. having antioxidant and anti-inflammatory activities)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,  
 (2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

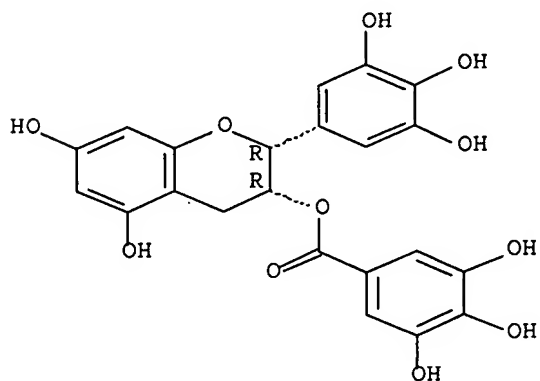




RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 7440-50-8 HCAPLUS

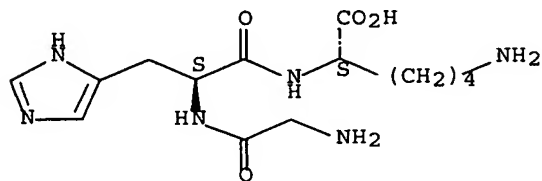
CN Copper (CA INDEX NAME)

Cu

RN 49557-75-7 HCAPLUS

CN L-Lysine, glycy-L-histidyl- (CA INDEX NAME)

Absolute stereochemistry.

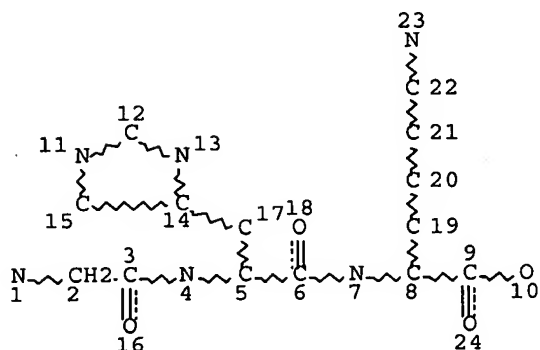


REFERENCE COUNT:

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THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L3 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3  
L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY? (2W) HIS? (2W) LY  
S?  
L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
L13 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11

=>

=> d ibib abs hitstr 113 1-7

L13 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:494280 HCAPLUS Full-text  
DOCUMENT NUMBER: 144:483523  
TITLE: Gene encoding methylated catechin synthase from tea  
and uses  
INVENTOR(S): Yamamoto, Mari; Kirita, Masanobu; Sami, Manabu; Ikeda,  
Mitsuo  
PATENT ASSIGNEE(S): National Agriculture and Bio-Oriented Research  
Organization, Japan; Asahi Breweries, Ltd.  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006054500 A1 20060526 WO 2005-JP20793 20051114  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,  
 SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,  
 YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

JP 2006141242 A 20060608 JP 2004-333290 20041117  
 PRIORITY APPLN. INFO.: JP 2004-333290 A 20041117  
 OTHER SOURCE(S): MARPAT 144:483523

AB The present invention provides a methylated catechin synthase (catechin methyltransferase) gene by which methylated catechin having a high antiallergic activity can be efficiently biosynthesized. The enzyme methylates epigallocatechin-3-O-gallate or epicatechin-3-O-gallate to produce the resp. methylated derivs. The inventors cloned a gene encoding a methylated catechin synthase and recombinantly expressed in *Escherichia coli*. The enzyme was characterized for substrate specificity.

IT 887521-98-4 887521-99-5 887522-00-1

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; gene encoding methylated catechin synthase from tea and uses)

RN 887521-98-4 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 887521-99-5 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 887522-00-1 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

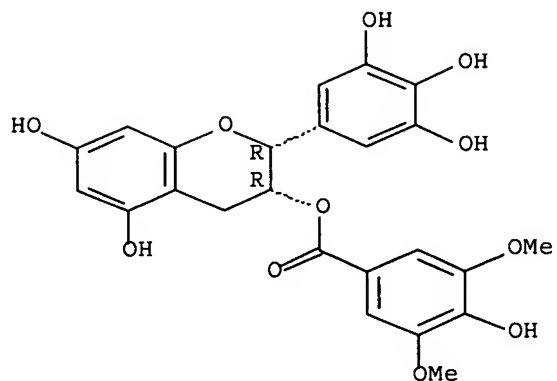
IT 173484-92-9P, Epigallocatechin-3-O-(3,5-O-dimethyl)gallate 224434-07-5P, Epigallocatechin-3-O-(4-O-methyl)gallate 263369-44-4P, Epigallocatechin-3-O-(3,4-O-dimethyl)gallate

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)  
 (gene encoding methylated catechin synthase from tea and uses)

RN 173484-92-9 HCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)

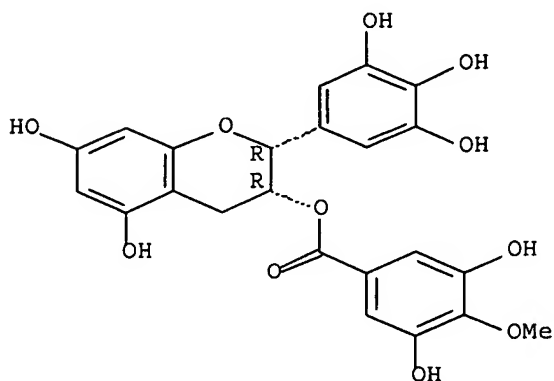
Absolute stereochemistry.



RN 224434-07-5 HCAPLUS

CN Benzoic acid, 3,5-dihydroxy-4-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

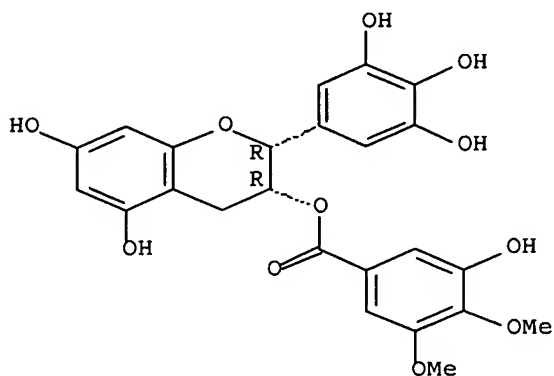
Absolute stereochemistry. Rotation (-).



RN 263369-44-4 HCAPLUS

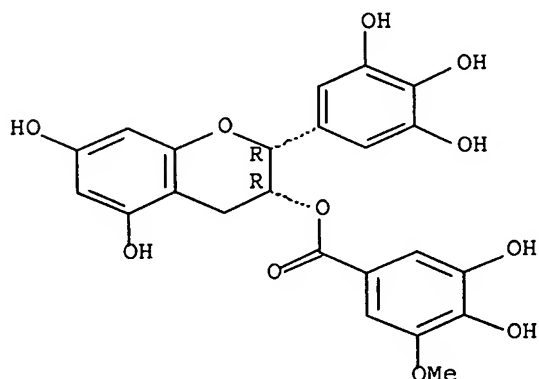
CN Benzoic acid, 3-hydroxy-4,5-dimethoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



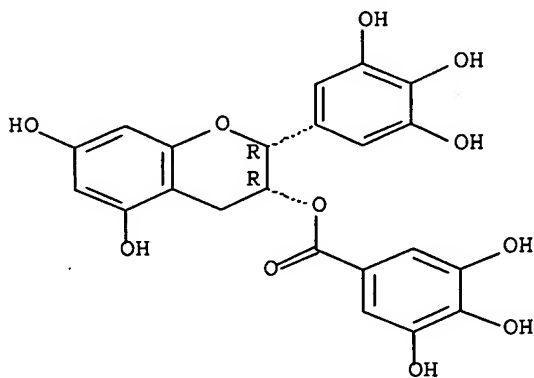
IT 83104-87-4P, Epigallocatechin-3-O-(3-O-methyl)gallate  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 BIOL (Biological study); PREP (Preparation)  
 (production of; gene encoding methylated catechin synthase from tea and  
 uses)  
 RN 83104-87-4 HCAPLUS  
 CN Benzoic acid, 3,4-dihydroxy-5-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-  
 2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 989-51-5, Epigallocatechin-3-O-gallate  
 RL: BCP (Biochemical process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (substrate, methylation of; gene encoding methylated catechin synthase  
 from tea and uses)  
 RN 989-51-5 HCAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-  
 (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:901955 HCAPLUS Full-text

DOCUMENT NUMBER: 143:222528

TITLE: Preventing or treating obesity and related disorders  
using substances that modify and/or stimulate  
endogenous CD1d antigen function

PATENT ASSIGNEE(S): Nestec S.A., Switz.

SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1566439	A1	20050824	EP 2004-3853	20040220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			EP 2004-3853	20040220

AB The present invention pertains to a method for preventing and/or treating obesity and associated disorders using substances and/or compns. that stimulates and/or modify endogenous CD1d function. The inventors generated CD1d gene knockout mice exhibiting an obese phenotype. A gene expression profiling assay was performed in skin tissue containing the s.c. fat layer from wild-type and CD1d knockout mice. The inventors found that in CD1d knockout mice genes known to be involved in obesity and diabetes mellitus are deregulated. According to another aspect the present invention also provides a method for screening for compds. suitable for use in the method and the composition of the present invention.

IT 478202-71-0, Lipoprotein receptor  
RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
(activity/expression in adipocyte, screening in assay; preventing or treating obesity and related disorders using substances that modify and/or stimulate endogenous CD1d antigen function)

RN 478202-71-0 HCAPLUS

CN Lipoprotein receptor LDL-related protein 1B receptor (human) (CA INDEX NAME)

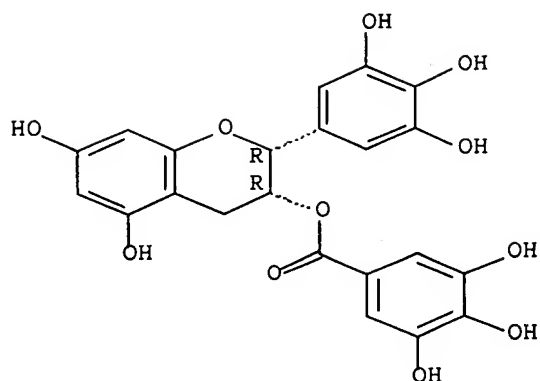
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 989-51-5 989-51-5D, Epigallocatechin  
-3-gallate, derivs.  
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(as anti-obesity agent; preventing or treating obesity and related disorders using substances that modify and/or stimulate endogenous CD1d antigen function)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

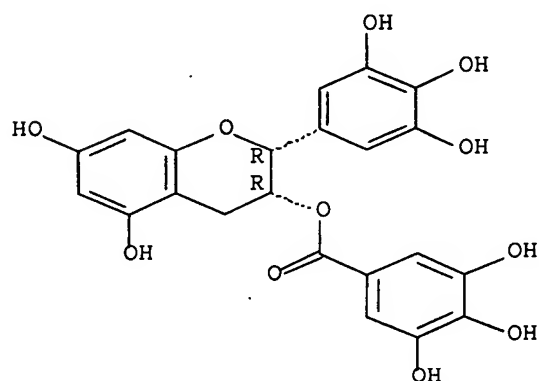
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester. (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:485526 HCAPLUS Full-text

DOCUMENT NUMBER: 141:34655

TITLE: Genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase

INVENTOR(S): Dixon, Richard A.; Paiva, Nancy L.; Xie, Deyu; Sharma, Shashi

PATENT ASSIGNEE(S): The Samuel Roberts Noble Foundation, Inc., USA

SOURCE: PCT Int. Appl., 159 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004002215 A2 20040108 WO 2003-US20481 20030630  
 WO 2004002215 A8 20040415  
 WO 2004002215 A3 20050303  
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 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
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 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003247824 A1 20040119 AU 2003-247824 20030630  
 EP 1546335 A2 20050629 EP 2003-762203 20030630  
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 NZ 535871 A 20060831 NZ 2003-535871 20030630  
 PRIORITY APPLN. INFO.: US 2003-392562 A1 20030628  
 US 2002-392562P P 20020628  
 WO 2003-US20481 W 20030630

AB The invention provides method and compns. for the modulation of condensed tannin production in plants. Thus, inhibition of anthocyanin production and introduction formation of condensed tannins is observed in flower petals of tobacco by constitutive expression of the Medicago truncatula anthocyanidin reductase (BAN) gene. The BAN gene encodes a novel enzyme of anthocyanidin reductase catalyzing the reduction of anthocyanidins into flavan-3-ols, which can then be polymerized into condensed tannins. BAN coding sequences are identified not only in M. truncatula, but also in Arabidopsis thaliana, barley, cotton, grape, and sorghum. The methods of the invention allow creation of plants having novel phenotypes. Increased expression of condensed tannins in plants may be used to increase the nutritional value of food plants for both human and animal consumption. Increased condensed tannin content also reduces the potential for bloat in animals fed certain forage plants low in condensed tannin content. The invention may also be used to modify plant pigmentation.

IT 701396-21-6

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (amino acid sequence; genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase)

RN 701396-21-6 HCAPLUS

CN Isomerase, chalcone (Arabidopsis thaliana clone WO2004002215-SEQID-24) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 970-74-1P, Epi-Gallocatechin

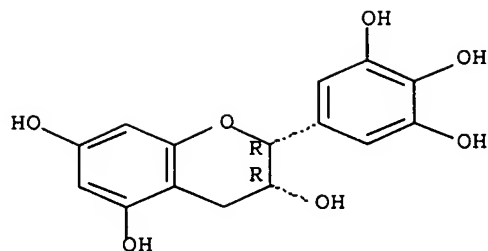
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation) (genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R) - (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).





L13 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:392376 HCAPLUS Full-text  
 DOCUMENT NUMBER: 140:401353  
 TITLE: Methods for increased expression of condensed tannins  
 in transgenic plants for use in forage crops  
 INVENTOR(S): Dixon, Richard A.; Paiva, Nancy L.; Xie, Deyu; Sharma,  
 Shashi  
 PATENT ASSIGNEE(S): The Samuel Roberts Nobel Foundation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 106 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004093632	A1	20040513	US 2003-610351	20030630
PRIORITY APPLN. INFO.:			US 2002-392562P	P 20020628

AB The invention provides methods for increased expression of condensed tannins in transgenic plants for use in forage crops. The production of condensed tannins in plants is regulated by several gene products, including anthocyanidin reductase (BAN), TTG1, TT2, TT8, TT12, and chalcone isomerase. The gene BAN was cloned and its product was determined to have anthocyanidin reductase enzyme activity, reducing cyanidin to catechin and epicatechin, pelargonidin to epi-afzelechin, and delphinidin to gallo-catechin and epigallocatechin. This invention focuses on gene transfer and expression of these tannin modulator genes, in transgenic forage crops. The increased tannin production is associated with plant phenotypic changes including a reduction in anthocyanin pigmentation, as well as increased nutritional value and reduced potential for animal bloat upon consumption of these modified crops.

IT 688367-09-1, Protein (Arabidopsis thaliana gene TT2)  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
 (amino acid sequence; methods for increased expression of condensed tannins in transgenic plants for use in forage crops)

RN 688367-09-1 HCAPLUS  
 CN Protein (Arabidopsis thaliana gene TT2) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

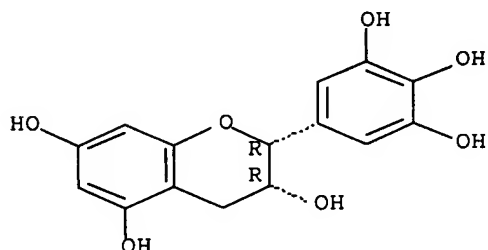
IT 970-74-1P, Epigallocatechin  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 BIOL (Biological study); PREP (Preparation)  
 (production of, following reduction of delphinidin, by anthocyanidin reductase;

methods for increased expression of condensed tannins in transgenic plants for use in forage crops)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:142983 HCAPLUS Full-text

DOCUMENT NUMBER: 140:187411

TITLE: Compositions containing peptide copper complexes and phytochemical compounds, and methods related thereto  
Patt, Leonard M.

INVENTOR(S): Procyte Corporation, USA

PATENT ASSIGNEE(S): PCT Int. Appl., 42 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014413	A1	20040219	WO 2003-US23293	20030724
WO 2004014413	A8	20040521		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2494156	A1	20040219	CA 2003-2494156	20030724
AU 2003256797	A1	20040225	AU 2003-256797	20030724
US 2004180102	A1	20040916	US 2003-627193	20030724
EP 1545579	A1	20050629	EP 2003-784817	20030724
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			

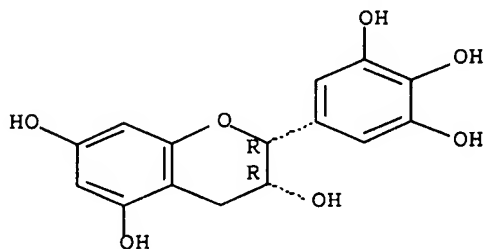
PRIORITY APPLN. INFO.: US 2002-400318P P 20020731  
WO 2003-US23293 W 20030724

AB Compns. having antioxidant, anti-inflammatory and/or cosmetic utility for a mammal, combining at least one peptide copper complex and at least one

phytochem. compound are described. More particularly, the phytochem. compound is a polyphenol or a carotenoid, the polyphenol being a flavanoid, a flavonoid, a flavonoid derivative, a flavolignan, a polyphenolic rhizome, or their mixts. Compns. for topical application include additives such as emollients, sunscreen agents, skin protectants, skin conditioning agents, and humectants. Methods, employing such compns., are described for enhancing or restoring the resistance of a mammal to oxidative or inflammatory damage, for accelerating wound healing, for cosmetically healing mammalian skin, and for stimulating hair growth, or preventing or treating hair loss. For example, a moisturizing lotion contained water 74%, glycerin 1.0%, xanthan gum 0.50%, diisopropyl adipate 4.0%, isocetyl stearate 6.0%, octyl palmitate 10.0%, glyceryl stearate 1.0%, cetyl alc. 1.0%, stearyl alc. 0.8%, behenyl alc. 0.5%, palmitic acid 0.3%, stearic acid 0.25%, glycyl-L-histidyl-L-lysine -copper complex 0.2%, catechin 0.01%, gallocatechin 0.01%, epicatechin 0.01%, propylene glycol 0.55%, diazolidinylurea 0.03%, and iodopropynyl Bu carbonate 0.02%. The formulation is beneficial as the phytochem. compound provides anti-inflammatory action to the skin in addition to the anti-inflammatory and tissue rebuilding activity provided by the presence of the copper peptide compound

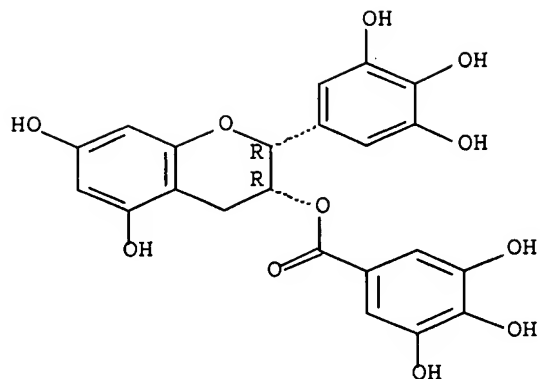
- IT 970-74-1, Epigallocatechin 989-51-5,  
Epigallocatechin gallate 49557-75-7D, Glycyl  
-L-histidyl-L-lysine, derivs., copper(II) complexes  
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
USES (Uses)  
(compns. containing peptide-copper complexes and phytochem. compds. having  
antioxidant and anti-inflammatory activities)
- RN 970-74-1 HCAPLUS  
CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,  
(2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



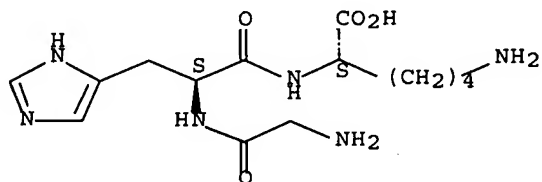
- RN 989-51-5 HCAPLUS  
CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 49557-75-7 HCAPLUS  
 CN L-Lysine, glycyl-L-histidyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:969412 HCAPLUS Full-text  
 DOCUMENT NUMBER: 140:730  
 TITLE: Human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer  
 INVENTOR(S): Wittig, Rainer; Poustka, Annemarie; Mollenhauer, Jan; Schadendorf, Dirk  
 PATENT ASSIGNEE(S): Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany  
 SOURCE: Eur. Pat. Appl., 23 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1369482	A1	20031210	EP 2002-12705	20020607
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2004038020	A1	20040506	WO 2003-EP6061	20030610
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003245927 A1 20040513 AU 2003-245927 20030610

PRIORITY APPLN. INFO.:

EP 2002-12705 A 20020607

WO 2003-EP6061 W 20030610

AB The present invention relates to the identification and use of target genes for the detection and treatment of drug-resistant tumor cells. The nucleic acids of the present invention exhibit a deregulated phenotype when the tumor cells are subjected to cytostatic drugs, i.e., they are expressed in a higher or lower amount as compared to parental drug-sensitive cancer cells. Thus, they can be used as a diagnostic and pharmaceutical tool to render drug-resistant cells drug-sensitive. In addition, the present invention includes the polypeptides encoded by the resp. nucleic acids, expression vectors harboring the nucleic acids, host cells for expression and methods for the diagnosis and treatment of drug-resistant tumor cells.

IT 179671-71-7 391970-73-3, Procollagen type V (human gene COL5A2 subunit  $\alpha$ 2) 459655-32-4, Protein (human clone hh04777s1 gene KIAA0938)

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer)

RN 179671-71-7 HCAPLUS

CN Laminin (human clone  $\lambda$ 7-1 gene LAMA4  $\alpha$ 4 chain precursor) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 391970-73-3 HCAPLUS

CN Procollagen type V (human gene COL5A2 subunit  $\alpha$ 2) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 459655-32-4 HCAPLUS

CN Protein (human clone hh04777s1 gene KIAA0938) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

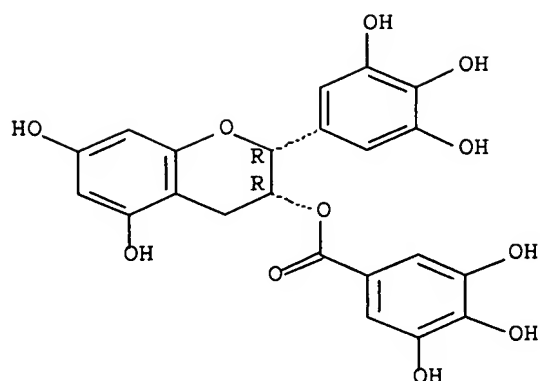
IT 989-51-5, Epigallocatechin gallate

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:633887 HCAPLUS Full-text

DOCUMENT NUMBER: 139:176980

TITLE: MICAL proteins of Drosophila and human interacting with CAS-L protein and playing a role in axonal repulsion and their uses

INVENTOR(S): Kolodkin, Alex L.; Terman, Jon Richard; Mao, Tianyi; Pasterkamp, Ronald Jeroen; Yu, Hung-hsiang

PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, USA

SOURCE: PCT Int. Appl., 367 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066821	A2	20030814	WO 2003-US3551	20030204
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003217334	A1	20030902	AU 2003-217334	20030204
US 2003232419	A1	20031218	US 2003-359012	20030204
EP 1572907	A2	20050914	EP 2003-713377	20030204
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRIORITY APPLN. INFO.:			US 2002-354178P	P 20020204
			US 2002-384302P	P 20020530
			US 2002-388325P	P 20020613
			WO 2003-US3551	W 20030204

AB Proteins that interact with CAS-L Cas-L (Crk-associated substrate-related protein, lymphocyte) and that play a role in plexin-mediated axonal repulsion are identified in *Drosophila* and human and genes encoding them are cloned. The proteins (MICAL: mol. interacting with CAS-L) and genes may be used in identifying agents that affect axon growth and placement. Furthermore, provided herein are methods for affecting axon growth and placement. The proteins were first identified in a two-hybrid screen for proteins interacting with *Drosophila* plexin A. The mRNA is widely distributed in the *Drosophila* embryo. P-element inactivation of the gene gave rise to flies with deficiencies in axonal guidance comparable to those seen in mutations in genes for semaphorins and plexins. The protein has a functional flavin monooxygenase domain that is essential for interactions with semaphorins. Gallic acid derivs. blocked semaphorin 3A axonal repulsion.

IT 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-

Epigallocatechin gallate 83104-87-4 89064-31-3

, Theasinensin A

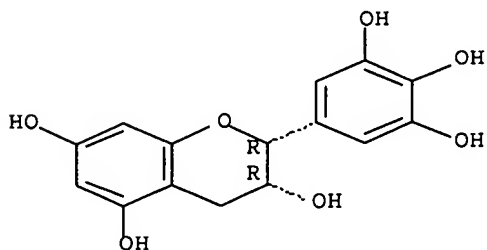
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(as inhibitor of flavin monooxygenase and axonal repulsion; MICAL proteins of *Drosophila* and human interacting with CAS-L protein and playing role in axonal repulsion and their uses)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

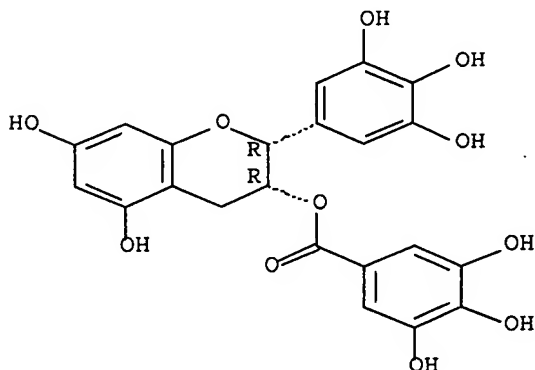
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

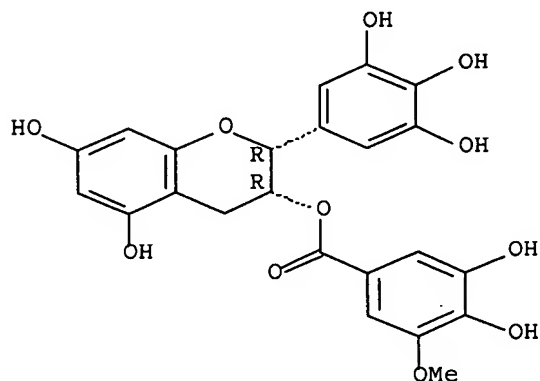
Absolute stereochemistry. Rotation (-).



RN 83104-87-4 HCAPLUS

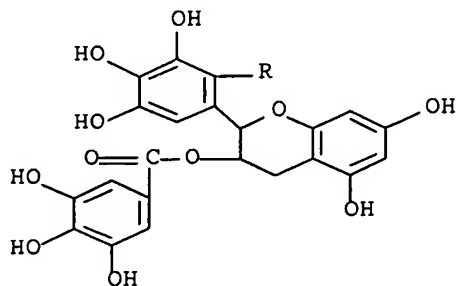
CN Benzoic acid, 3,4-dihydroxy-5-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



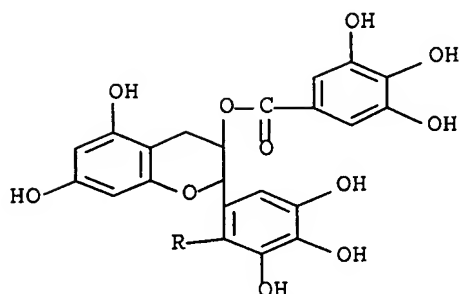
RN 89064-31-3 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, [(1R)-4,4',5,5',6,6'-hexahydroxy[1,1'-biphenyl]-2,2'-diyl]bis[(2R,3R)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-2,3-diyl] ester (9CI) (CA INDEX NAME)



PAGE 1-A





IT 579542-95-3 579542-98-6

RL: PRP (Properties)

(unclaimed protein sequence; mICAL proteins of Drosophila and human interacting with CAS-L protein and playing a role in axonal repulsion and their uses)

RN 579542-95-3 HCAPLUS

CN 26: PN: WO03066821 SEQID: 26 unclaimed protein (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

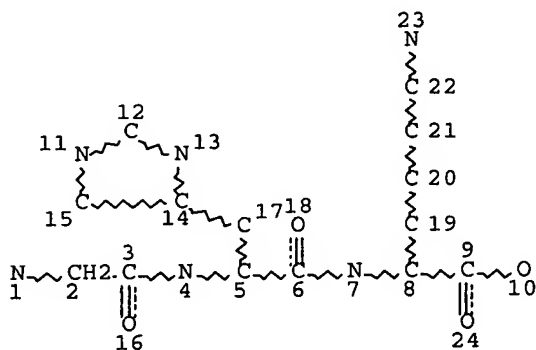
RN 579542-98-6 HCAPLUS

CN 29: PN: WO03066821 SEQID: 29 unclaimed protein (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

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L3 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3

L6 262726 SEA FILE=REGISTRY ABB=ON PLU=ON COPPER?/CN

L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP

L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
 L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
 S?  
 L10 1410113 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?  
 L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
 L12 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11  
 L13 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11  
 L18 232 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L10  
 L21 5 SEA FILE=REGISTRY ABB=ON PLU=ON SALINE/BI  
 L22 SEL PLU=ON L21 1- CHEM : 13 TERMS  
 L23 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L22  
 L24 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR SALINE  
 L25 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L24  
 L26 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L12 OR L13)

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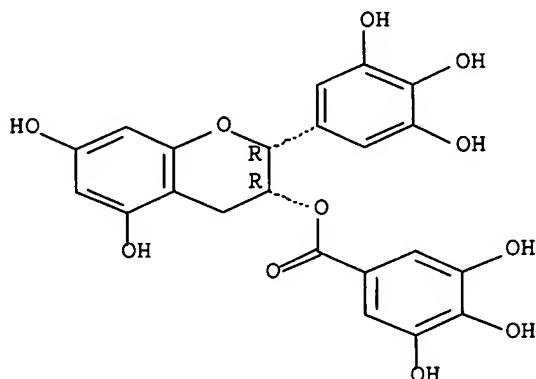
L26 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2007:39067 HCAPLUS Full-text  
 DOCUMENT NUMBER: 147:63807  
 TITLE: Protective effect of epigallocatechin  
 -3-gallate on kidney injury of mice with endotoxemia  
 AUTHOR(S): Xu, Wenping; Cao, Yongan; Ji, Yuee; Shi, Wenyan  
 CORPORATE SOURCE: Department of Preclinical Medicine, Jiangsu Staff  
 Medical University, Nanjing, Jiangsu Province, 210029,  
 Peop. Rep. China  
 SOURCE: Nanjing Yike Daxue Xuebao (2005), 25(10), 727-728  
 CODEN: NYDXFS; ISSN: 1007-4368  
 PUBLISHER: Nanjing Yike Daxue Xuebao Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB Forty Kunming mice were randomly divided into 4 groups: control group (N  
 group), lipopolysaccharide group (LPS group), EGCG 1 group, and EGCG 2 group,  
 10 mice for each group. Mice in LPS, EGCG 1 and EGCG 2 group were injected of  
 5 mg/kg LPS, then mice in EGCG 1 and EGCG 2 group were given 10 mg/kg EGCG and  
 30 mg/kg EGCG resp. 20 min later. Mice in N group was injected of 5 mg/kg  
 saline. The content of malondialdehyde (MDA) and activity of superoxide  
 dismutase (SOD) and Ca<sup>2+</sup>-Mg<sup>2+</sup> ATPase in renal tissue were measured. The  
 results showed that the content of MDA significantly increased and activity of  
 SOD significantly decreased in LPS group compared with those in N group  
 (P<0.01, 0.01); the activity of Ca<sup>2+</sup>-Mg<sup>2+</sup> ATPase decreased. The content of  
 MDA decreased in EGCG 1 group and significantly decreased in EGCG 2 group  
 (P<0.01) compared with LPS group; activity of SOD increased in EGCG 1 group  
 and significantly increased in EGCG 2 group (P<0.01). The activity of Ca<sup>2+</sup>-  
 Mg<sup>2+</sup> ATPase increased EGCG 1 group and EGCG 2 group, but it was not  
 significantly. The results indicated that EGCG has protective effect on kidney  
 injury of mice with endotoxemia.  
 IT 9054-89-1, Superoxide dismutase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (protective effect of epigallocatechin-3-gallate on kidney  
 injury of mice with endotoxemia)  
 RN 9054-89-1 HCAPLUS  
 CN Dismutase, superoxide (CA INDEX NAME)  
 \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 IT 989-51-5, Epigallocatechin-3-gallate  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)  
 (protective effect of epigallocatechin-3-gallate on kidney  
 injury of mice with endotoxemia)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L26 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:973023 HCAPLUS Full-text

DOCUMENT NUMBER: 145:501682

TITLE: Effects of oral green tea polyphenols on preservation of isolated heart

AUTHOR(S): Gao, Wen-bo; Zhu, You-hua; Wang, Ya-wei

CORPORATE SOURCE: Institute of Organ Transplantation, Shanghai  
 Changzheng Hospital, Second Military Medical  
 University, Shanghai, 200003, Peop. Rep. China

SOURCE: Shiyong Yixue Zazhi (2006), 22(12), 1362-1363  
 CODEN: SYZAFM; ISSN: 1006-5725

PUBLISHER: Shiyong Yixue Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

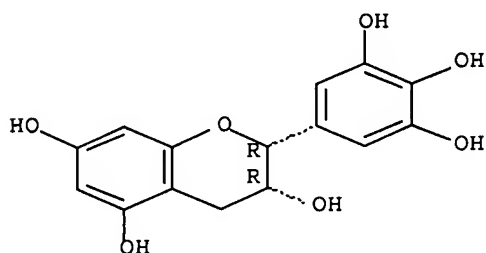
AB This paper investigated the effects of oral green tea polyphenols (GTP) on the preservation of isolated rat heart. Sixteen SD rats were randomly divided into 2 groups. Eight rats in the exptl. group were orally administered with GTP for 20 days, while eight rats in the control group received saline solution. The rat hearts were removed and performed with Langendorff perfusion, and the cardiac function was measured. The isolated hearts were stored in UW solns. at 4°C for 8 h. The cardiac function was measured again after reperfusion. The activity of lactate dehydrogenase (LDH) and creatine kinase (CK) from the coronary effluent and the activity of superoxide dismutase (SOD) and the malondialdehyde (MDA) content in myocardial tissue were detected. The myocardial ultrastructure was examined. Results showed that the parameters of the cardiac function except heart rate in the exptl. group were significantly better than those in the control group ( $P < 0.05$ ). Myocardial water content, LDH and CK activity, and MDA content in the exptl. group were lower than those in the control group ( $P < 0.05$ ). Coronary flow and SOD activity in the exptl. group were higher than those in the control group ( $P < 0.05$ ). The exptl. group had improved myocardial ultrastructure. In conclusion, oral GTP had protective effects on the isolated heart.

IT 9054-89-1, Superoxide dismutase  
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (effects of oral green tea polyphenols on preservation of isolated heart)  
 RN 9054-89-1 HCAPLUS  
 CN Dismutase, superoxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

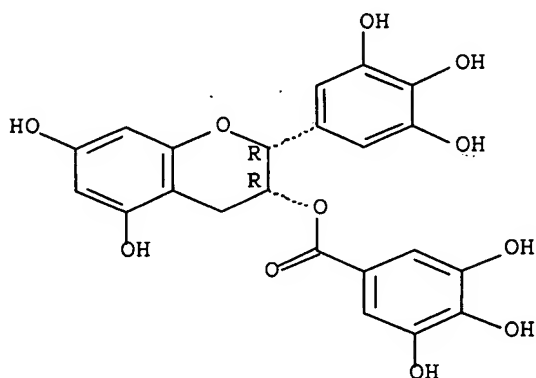
IT 970-74-1, Epigallocatechin 989-51-5,  
 Epigallocatechin gallate  
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (effects of oral green tea polyphenols on preservation of isolated heart)  
 RN 970-74-1 HCAPLUS  
 CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



DOCUMENT NUMBER: 144:184652  
 TITLE: Novel pathways in the etiology of cancer, and treatment methods  
 INVENTOR(S): Benz, Christopher C.  
 PATENT ASSIGNEE(S): Buck Institute for Age Research, USA  
 SOURCE: U.S. Pat. Appl. Publ., 49 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006024691	A1	20060202	US 2005-90546	20050324
PRIORITY APPLN. INFO.:			US 2004-556774P	P 20040325
			US 2004-580534P	P 20040616
			US 2004-629691P	P 20041119

AB The invention pertains to the identification of two novel epithelial signaling pathways in ER-pos. breast cancers and the discovery that the cellular biol. and (likely also the clin. outcome) of ER-pos. breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF- $\kappa$ B activation and/or DNA binding is implicated in the etiol. of ER-pos. breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by phosphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDa) ER as well as the phosphorylating activation of a truncated and nuclear-localized ER variant (.apprx.52 kDa). Also disclosed are methods for identifying patients likely to respond to hormonal therapy and for selecting a therapeutic regimen for the treatment of cancer.

IT 9054-89-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (manganese-dependent; pathways in etiol. of cancer, and treatment methods)

RN 9054-89-1 HCAPLUS

CN Dismutase, superoxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

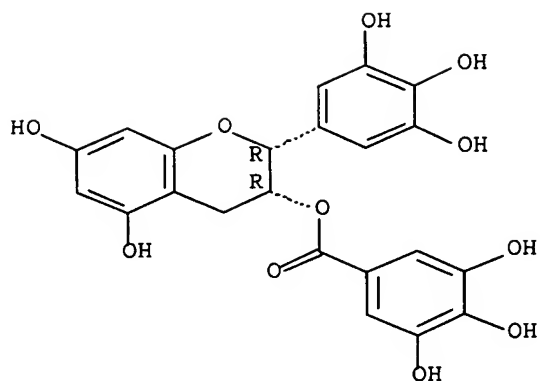
IT 989-51-5, Epigallocatechin-3-gallate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pathways in etiol. of cancer, and treatment methods)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L26 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:788478 HCAPLUS Full-text

DOCUMENT NUMBER: 140:258840

TITLE: Investigating the stability of EGCg in aqueous media

AUTHOR(S): Zhou, Q.; Chiang, H.; Portocarrero, C.; Zhu, Y.; Hill, S.; Heppert, K.; Jayaratna, H.; Davies, M.; Janle, E.; Kissinger, P.

CORPORATE SOURCE: Bioanalytical Systems, Inc., West Lafayette, IN, 47906, USA

SOURCE: Current Separations (2003), 20(3), 83-86

CODEN: CUSEEW; ISSN: 0891-0006

PUBLISHER: Bioanalytical Systems, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB (-)-Epigallocatechin gallate (EGCg) is the most prevalent catechin in green tea extract, to which most of the health benefit of green tea has been attributed. Since EGCg is an antioxidant, its stability in various biol. fluids must be evaluated prior to the study of its in vivo pharmacokinetics and pharmacodynamics. For this purpose, a multi-channel LC/EC (liquid chromatog. with electrochem. detection) method was developed to determine EGCg quantity at a concentration very likely to be found in vivo (<500 ng/mL). A microbore column was used to minimize sample consumption. The detection limit for EGCg was 0.8 ng/mL at a potential of +600 mV vs. Ag/AgCl. The calibration curve was linear over the range of 1-500 ng/mL. Using this method, the stability of EGCg (100 ng/mL) in 10 mM HCl, saline and Ringers' solution, with or without preservatives, was monitored. It was found that EGCg was very stable in all these solns. at low temperature only when they were free of certain metal ion contaminants. Therefore, it is suggested to stabilize EGCg solns. by use of a metal scavenger (EDTA), an antioxidant (e.g. ascorbic acid), keeping the pH below or close to neutral and keeping the temperature cold during sampling and storage of EGCg.

IT 7440-50-8, Copper, biological studies

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stability of epigallocatechin gallate in aqueous media)

RN 7440-50-8 HCAPLUS

CN Copper (CA INDEX NAME)

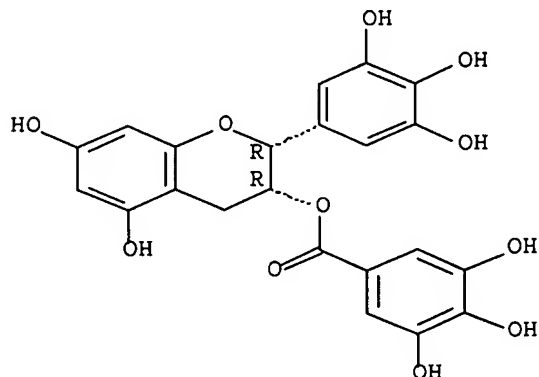
IT 989-51-5, (-)-Epigallocatechin gallate  
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(stability of epigallocatechin gallate in aqueous media)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:166105 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:256454  
 TITLE: epicatechin-copper(II) complexes: Damage of

small intestinal epithelium

AUTHOR(S): Stavrescu, Ruxandra B.; Kimura, Takahide; Hayakawa, Fumiko; Ando, Takashi

CORPORATE SOURCE: Department of Chemistry, Shiga University of Medical Science, Seta, Otsu, Shiga, 520-2192, Japan

SOURCE: Central European Journal of Chemistry (2003), 1(1), 39-56  
 CODEN: CEJCAZ; ISSN: 1644-3624

URL: <http://pippo.ingentaselect.com/vl=17857725/cl=110/nw=1/rpsv/catchword/cesj/16443624/previews/4.pdf>

PUBLISHER: Central European Science Journals

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB Four epicatechins [(-)-epicatechin (EC), (-)-epicatechin gallate (ECg), (-)-epigallocatechin (EGC), (-)-epigallocatechin gallate (EGCg)] and their corresponding copper complexes were compared with regard to their effect on the viability of Caco-2 colon cancer cells in vitro, measured by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay. The viability of Caco-2 cells exposed to EC (1 mM), ECg (1 mM) or EGC (1 mM) resp., for 30 min, was comparable to that of the saline control group, while EGCg (1 mM) apparently enhanced cellular activity. In contrast, the cells treated with epicatechin-copper complexes were killed. Bivalent copper (1 mM), in similar conditions, did not affect the cells. No cell leakage or other

histol. differences were observed, implying a rapid cell death. The suggested mechanism of killing is by OH radical attack, produced in the presence of epicatechin-copper complexes, but not in the presence of either of the epicatechins or copper alone. The reaction sites are discussed.

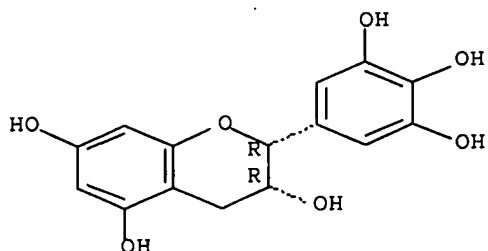
IT 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-  
Epigallocatechin gallate

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(complexes with copper; damage of small intestinal epithelium  
by epicatechin-copper(II) complexes)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,  
(2R,3R)- (CA INDEX NAME)

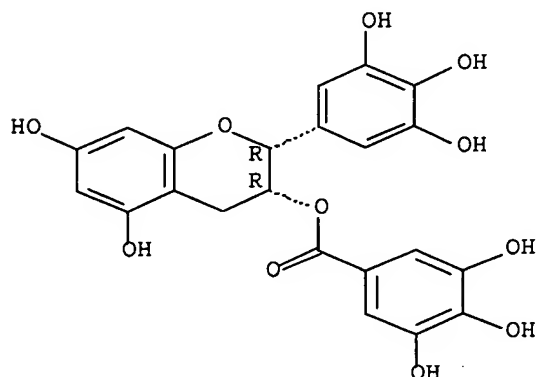
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-  
(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 7440-50-8, Copper, biological studies

RL: PAC (Pharmacological activity); BIOL (Biological study)  
(complexes with epicatechins; damage of small intestinal epithelium by  
epicatechin-copper(II) complexes)

RN 7440-50-8 HCAPLUS

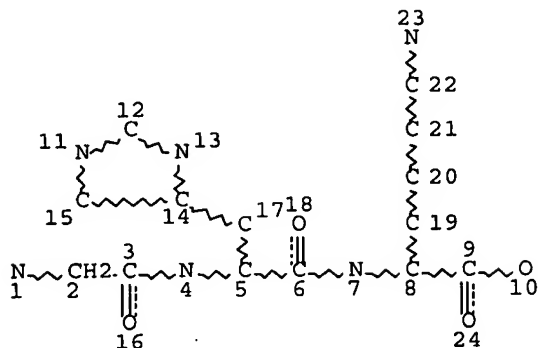
CN Copper (CA INDEX NAME)

Cu



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L3 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3  
L6 262726 SEA FILE=REGISTRY ABB=ON PLU=ON COPPER?/CN  
L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
S?  
L10 1410113 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?  
L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
L12 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11  
L13 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11  
L18 232 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L10  
L21 5 SEA FILE=REGISTRY ABB=ON PLU=ON SALINE/BI.  
L22 SEL PLU=ON L21 1- CHEM : 13 TERMS  
L23 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L22  
L24 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR SALINE  
L25 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L24  
L26 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L12 OR L13)  
L30 58 SEA FILE=HCAPLUS ABB=ON PLU=ON ("PATT L"/AU OR "PATT L M"/AU  
OR "PATT LEON A"/AU OR "PATT LEONARD M"/AU)  
L31 43 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 NOT (L9 OR L13 OR L26)

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L31 ANSWER 1 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:195795 HCAPLUS Full-text

DOCUMENT NUMBER: 144:260120  
TITLE: Polyethylene glycol-peptide copper complexes and compositions for cosmetic and therapeutic use  
INVENTOR(S): Patt, Leonard M.  
PATENT ASSIGNEE(S): Procyte Corporation, USA  
SOURCE: PCT Int. Appl., 31 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006023465	A1	20060302	WO 2005-US29047	20050816
WO 2006023465	A8	20060601		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 2006052287	A1	20060309	US 2005-204772	20050816
PRIORITY APPLN. INFO.:			US 2004-602715P	P 20040818

OTHER SOURCE(S): MARPAT 144:260120

AB This invention relates to compns. comprising polyethylene glycol mols. coupled to peptide copper complexes, and, addnl., to such compns. formulated for use as pharmaceutical and cosmetic products, as well as to medical devices that comprise such compns.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:121345 HCAPLUS Full-text

DOCUMENT NUMBER: 126:126927

TITLE: Stable copper(I) complexes as active therapeutic substances

INVENTOR(S): Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

PATENT ASSIGNEE(S): Procyte Corporation, USA; Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

SOURCE: PCT Int. Appl., 104 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9639144	A1	19961212	WO 1996-US10122	19960606
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,			

ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,  
 LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
 SE, SG

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

AU 9662748 A 19961224 AU 1996-62748 19960606

PRIORITY APPLN. INFO.: US 1995-468645 A 19950606

WO 1996-US10122 W 19960606

AB Stable Copper(I) complexes and methods relating thereto are disclosed. The stable Copper (I) complexes comprise a Copper(I) ion complexed by a multi-dentate ligand which favors the +1 oxidation state for copper. The complexes may be used as wound healing agents, anti-oxidative agents, anti-inflammatory agents, lipid modulating agents, signal transduction modulating agents, hair growth agents, and antiviral agents. Uses of this invention also include inhibition of viral infection, as well as inhibiting transmission of sexually transmitted diseases. The stable Copper(I) complexes of the invention include neocuproine Copper(I) and bathocuproine disulfonic acid Copper(I). Preparation of copper (I) neocuproine is described, as are inhibitory effects of the complexes of the invention against e.g a variety of viruses.

L31 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:150305 HCAPLUS Full-text

DOCUMENT NUMBER: 124:185146

TITLE: Stimulation of hair growth by peptide-copper complexes

INVENTOR(S): Pallenberg, Alexander J.; Patt, Leonard M.;

Trachy, Ronald E.

PATENT ASSIGNEE(S): Procyte Corp., USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9535085	A1	19951228	WO 1995-US7626	19950616
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5538945	A	19960723	US 1994-261475	19940617
CA 2192944	A1	19951228	CA 1995-2192944	19950616
CA 2192944	C	20001017		
AU 9528615	A	19960115	AU 1995-28615	19950616
EP 765152	A1	19970402	EP 1995-923906	19950616
EP 765152	B1	20011107		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9508044	A	19971118	BR 1995-8044	19950616
JP 10504286	T	19980428	JP 1995-502485	19950616
AT 208181	T	20011115	AT 1995-923906	19950616
ES 2162637	T3	20020101	ES 1995-923906	19950616
PT 765152	T	20020328	PT 1995-923906	19950616
US 6017888	A	20000125	US 1997-996307	19971223
JP 2006328076	A	20061207	JP 2006-196269	20060718

## PRIORITY APPLN. INFO.:

US 1994-261475	A 19940617
JP 1996-502485	A3 19950616
WO 1995-US7626	W 19950616
US 1996-683889	B1 19960719

OTHER SOURCE(S): MARPAT 124:185146

AB Peptide-copper complexes are disclosed which stimulate the growth of hair on warm-blooded animals. The peptide-copper complexes are dipeptides or tripeptides chelated to copper at a molar ratio ranging from about 1:1 to 3:1, with the second position of the peptide from the amino terminus being histidine, arginine or derivative thereof. A solution of CuCl<sub>2</sub> was added to a solution of Lalanyl-L-histidyl-L-lysine.2HCl (preparation given) (I), then the pH was adjusted to 6.89 to obtain an aqueous solution containing I:Cu (II) at a molar ratio of peptide to copper of 1.1:1. Administration of a topical formulation of 0.1% II on mice skin increased the hair growth in treated area by 90.14% after 34 days.

L31 ANSWER 4 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:47479 HCAPLUS Full-text

DOCUMENT NUMBER: 124:155626

TITLE: Quantitative assessment of peptide-copper complex-induced hair follicle stimulation using the fuzzy rat

AUTHOR(S): Trachy, Ronald E.; Uno, Hideo; Packard, Shelley; Patt, Leonard M.

CORPORATE SOURCE: Department Toxicology, ProCyte Corporation, Kirkland, WA, USA

SOURCE: Dermatologic Research Techniques (1996), 227-39.  
Editor(s): Maibach, Howard I. CRC: Boca Raton, Fla.  
CODEN: 62DZAA

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The fuzzy rat model was used to evaluate the effects of a peptide-copper compound, PC 1031, on hair growth. Topical treatment with PC 1031 resulted in an increase in the percentage of hair follicles in the anagen or growth phase. PC 1031 also caused an increase in hair follicle size, both in terms of the percentage of telogen and anagen follicles of terminal length in follicle cross-sectional area.

L31 ANSWER 5 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:47478 HCAPLUS Full-text

DOCUMENT NUMBER: 124:155625

TITLE: Phototrichogram analysis of hair follicle stimulation: A pilot clinical study with a peptide-copper complex

AUTHOR(S): Trachy, Ronald E.; Patt, Leonard M.; Duncan, Gordon M.; Kalis, Bernard

CORPORATE SOURCE: Department Toxicology, ProCyte Corporation, Kirkland, WA, USA

SOURCE: Dermatologic Research Techniques (1996), 217-26.  
Editor(s): Maibach, Howard I. CRC: Boca Raton, Fla.  
CODEN: 62DZAA

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The hair densities in the present study were more consistent with the unit area trichogram data (approx. 150-300 hairs cm<sup>2</sup>) than with studies using direct hair counting methodologies. The phototrichogram results with 10% PC 1031 demonstrated an overall trend toward hair regrowth, while the vehicle

group experienced a decrease in hair d. The relative efficacy of a peptide-copper complex (PC 1031) and minoxidil is difficult to assess at this time. However, when evaluated in sep. studies utilizing sensitive anal. techniques rather than direct counting, both drugs appear to at least arrest hair loss, and perhaps stimulate hair growth.

L31 ANSWER 6 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:808956 HCAPLUS Full-text

DOCUMENT NUMBER: 123:306037

TITLE: Inhibition of the human immunodeficiency virus-1 protease and human immunodeficiency virus-1 replication by bathocuproine disulfonic acid Cul+

AUTHOR(S): Davis, David A.; Branca, Andrew A.; Pallenberg, Alexander J.; Marschner, Thomas M.; Patt, Leonard M.; Chatlynne, Louise G.; Humphrey, Rachel W.; Yarchoan, Robert; Levine, Rodney L.

CORPORATE SOURCE: Lab. Biochem., Natl. Heart, Lung and Blood Inst., Bethesda, MD, 20892-0320, USA

SOURCE: Archives of Biochemistry and Biophysics (1995), 322(1), 127-34

CODEN: ABBIA4; ISSN: 0003-9861

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The protease encoded by the human immunodeficiency virus-1 (HIV-1) is essential for processing viral polyproteins which contain the enzymes and structural proteins required for the infectious virus. It was previously found that cupric chloride, in the presence of dithiothreitol or ascorbic acid, could inhibit the HIV-1 protease. It was suggested that a Cul+ chelate was the moiety responsible for inhibition of the protease. This hypothesis has now been investigated directly by utilizing the stable Cul+ chelate, bathocuproine disulfonic acid Cul+ (BCDS-Cul+). BCDS-Cul+ inhibited the HIV-1 wild type protease as well as a mutant HIV-1 protease lacking cysteines. An analog, neocuproine-Cul+ was only partially inhibitory. BCDS-Cul+ was a competitive inhibitor of the mutant HIV-1 protease with an apparent  $K_i$  of 1  $\mu$ M. Replication of HIV-1 in human lymphocytes and the cytotoxic effect of HIV-1 in CEM cells was inhibited by micromolar BCDS-Cul+. Neocuproine-Cul+ was too cytotoxic to be evaluated in this assay. Inhibition of the protease and of HIV replication by BCDS-Cul+ was dependent on the presence of Cul+ as BCDS alone was ineffective. EDTA blocked the inhibition of the protease by Cul+ but was unable to block inhibition of the protease by BCDS-Cul+, indicating that the Cul+ complex was the inhibitory agent. The apparent IC50 for BCDS-Cul+ on the inhibition of replication by primary isolates of HIV-1 was 5  $\mu$ M. However, BCDS-Cul+ did not affect polyprotein processing in an H9 cell line chronically infected with HIV-1, indicating that BCDS-Cul+ acts by yet another mechanism to block HIV infection. Other possible targets for BCDS-Cul+ include inhibition of viral adsorption and/or inhibition of the HIV-1 integrase.

L31 ANSWER 7 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:347104 HCAPLUS Full-text

DOCUMENT NUMBER: 122:256396

TITLE: Stable copper(I) complexes with multidentate ligands as therapeutic agents

INVENTOR(S): Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

PATENT ASSIGNEE(S): Procyte Corp., USA  
 SOURCE: PCT Int. Appl., 88 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9427594	A2	19941208	WO 1994-US6247	19940602
WO 9427594	A3	19950427		
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2163640	A1	19941208	CA 1994-2163640	19940602
AU 9470517	A	19941220	AU 1994-70517	19940602
ZA 9403857	A	19950201	ZA 1994-3857	19940602
EP 701439	A1	19960320	EP 1994-919342	19940602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
ZA 9409336	A	19950808	ZA 1994-9336	19941124
PRIORITY APPLN. INFO.:			US 1993-71440	A 19930602
			WO 1994-US6247	W 19940602

AB Stable copper(I) complexes useful as therapeutic agents comprise a copper(I) ion complexed by a multi-dentate ligand which favors the +1 oxidation state for copper. The stable copper(I) complexes of the invention are useful as wound healing agents, anti-oxidative agents, anti-inflammatory agents, lipid modulating agents, signal transduction modulating agents, hair growth agents, and anti-viral agents. Exemplary stable copper(I) complexes include neocuproine copper(I) and bathocuproine disulfonic acid copper(I). The synthesis of neocuproine copper(I) complex synthesis is given.

L31 ANSWER 8 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:11696 HCAPLUS Full-text

DOCUMENT NUMBER: 118:11696

TITLE: Control of continuous vibration fluidized-bed drying by measurement of relative granule humidity

AUTHOR(S): Fuchs, G.; Patt, L.; Haberstroh, A.

CORPORATE SOURCE: Sandoz A.-G., Nuernberg, W-8500/1, Germany

SOURCE: Pharmazeutische Industrie (1992), 54(4), 366-9

CODEN: PHINAN; ISSN: 0031-711X

DOCUMENT TYPE: Journal

LANGUAGE: German

AB A device for the online measurement of relative granule moisture contents for process control during fluidized-bed drying in the manufacture of solid pharmaceuticals is described. Consisting of a plate condensor situated behind a teflon filter, the sensor measures moisture contents by changes in the former's dielec. constant as a result of humidity changes in the air in contact with the granules. The performance of the system in optimizing the drying process in relation to residual moisture content reproducibility is illustrated with data from model granulations.

L31 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:137820 HCAPLUS Full-text

DOCUMENT NUMBER: 108:137820  
TITLE: Film coating under production conditions with a solvent recovery system and in a closed gas circuit  
AUTHOR(S): Koeblitz, T.; Patt, L.; Dertinger, G.  
CORPORATE SOURCE: Maschinenfabr., A. Heinen G.m.b.H., Varel, D-2930, Fed. Rep. Ger.  
SOURCE: Pharmazeutische Industrie (1988), 50(1), 81-91  
CODEN: PHINAN; ISSN: 0031-711X  
DOCUMENT TYPE: Journal  
LANGUAGE: German

AB The industrial manufacture of cellulose-coated tablets by using organic solvents is described. In addition to discussing the central process, problems of dust separation in a closed gas circuit, air throughout in the coater, organic solvent spraying rate, and solvent recovery are described, as well as energy efficiency data and safety considerations. Various solvent mixts. (of Me<sub>2</sub>CO, CH<sub>2</sub>Cl<sub>2</sub>, MeOH, and EtOH) were successfully employed; in all cases high product qualities with low residual solvent contents were observed

L31 ANSWER 10 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:614315 HCAPLUS Full-text

DOCUMENT NUMBER: 107:214315

TITLE: Nuclear peptides from calf liver: large scale isolation and fractionation; control of gene expression in cell-free systems, and inhibition of growth of cells in culture

AUTHOR(S): Hillar, M.; Santarelli, I.; Stolzmann, Z.; Wafeeg, W.; Allen, S.; Chan, J. Y. H.; Patt, L. M.; Houck, J. C.; Wyborny, L. E.

CORPORATE SOURCE: Dep. Biol., Texas Southern Univ., Houston, TX, 77004, USA

SOURCE: Basic and Applied Histochemistry (1987), 31(3), 299-313

CODEN: BAHID7; ISSN: 0391-7258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB DNA and nuclear RNA fractions contain small peptides (mol. weight 600-1500) attached noncovalently. A large-scale isolation procedure was developed for the extraction of such peptides (deprimerones) directly from the lysed nuclei. Further purification and fractionation were performed by chromatog. on Sephadex, silica gel, and HPLC C18 reversed-phase columns. HPLC fractionation yielded 11 peaks. The peptides are rich in serine, glycine, alanine, and acidic amino acids. They do not contain S-containing amino acids. Only occasionally tyrosine, phenylalanine, histidine, arginine, and a very moderate amount of lysine are found. These peptides are active in inhibiting gene expression in cell-free systems and incorporation of labeled thymidine in L 1210 murine leukemic cell culture. Thorough and exhaustive anal. demonstrated that the isolated peptides are not degradative products of histone or nonhistone chromosomal proteins.

L31 ANSWER 11 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:98251 HCAPLUS Full-text

DOCUMENT NUMBER: 106:98251

TITLE: Low molecular weight peptides bound to nucleic acids: isolation, structure and effects on gene expression

AUTHOR(S): Santarelli, I.; Hillar, M.; Stolzmann, Z.; Chan, J. Y. H.; Patt, L. M.; Houck, J. C.

CORPORATE SOURCE: Univ. Camerino, Camerino, 62032, Italy  
SOURCE: Serono Symposia Publications from Raven Press (1986),  
34(Biol. Regul. Cell Proliferation), 35-8  
CODEN: SPRPDU; ISSN: 0733-897X

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The large-scale isolation and fractionation of deprimerones, low-mol.-weight (600-1500-dalton) peptides bound to nucleic acid, from calf liver nuclear and polysomal RNA fractions are reported. Standard methods were used. One of the polysomal deprimerones was purified to homogeneity and its amino acid sequence was determined. The effect of deprimerones on replication is mediated via DNA polymerase  $\beta$  activity.

L31 ANSWER 12 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:83890 HCAPLUS Full-text

DOCUMENT NUMBER: 104:83890

TITLE: Nuclear peptides from calf liver: large scale isolation and fractionation; control of gene expression in cell-free systems, and inhibition of growth of cells in culture

AUTHOR(S): Hillar, Marian; Santerelli, Ivano; Stolzmann, Zdzislaw; Wafeeg, Warren; Allen, Sharon; Chan, John Y. H.; Patt, Leonard M.; Houck, John C.; Wyborny, Leigh E.

CORPORATE SOURCE: Dep. Biol., Texas South. Univ., Houston, TX, 77004, USA

SOURCE: Physiological Chemistry and Physics and Medical NMR (1985), 17(3), 325-43  
CODEN: PCPNER; ISSN: 0748-6642

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB DNA and nuclear RNA fractions contain small peptides (deprimerones) (600-1500 daltons) attached noncovalently. A large-scale isolation procedure was developed for the extraction of such peptides directly from the lysed nuclei. Further purification and fractionation was performed by chromatog. on Sephadex, silica gel, and HPLC C18-reverse phase columns. HPLC fractionation yielded 11 peaks. The peptides are rich in serine, glycine, alanine, and acidic amino acids. They do not contain S-containing amino acids. Only occasionally tyrosine, phenalalnine, histidine, arginine, and very moderate amts. of lysine are found. These peptides are active in inhibiting gene expression in cell-free systems and incorporation of labeled thymidine into L 1210 murine leukemic cell culture. Thorough and exhaustive anal. demonstrated that the isolated peptides are not degradative products of histone or nonhistone chromosomal proteins.

L31 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:83889 HCAPLUS Full-text

DOCUMENT NUMBER: 104:83889

TITLE: Small peptides bound to polysomal RNA inhibit gene expression in cell-free systems, replication of stimulated lymphocytes and DNA repair in isolated chromatin

AUTHOR(S): Hillar, Marian; Stolzman, Zdzislaw; Santarelli, Ivano; Patt, Leonard M.; Houck, John C.; Chan, John Y. H.; Wyborny, Leigh E.

CORPORATE SOURCE: Dep. Biol., Texas South. Univ., Houston, TX, 77004,



USA  
SOURCE: Physiological Chemistry and Physics and Medical NMR  
(1985), 17(3), 307-23  
CODEN: PCPNER; ISSN: 0748-6642  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Polysomal poly(A)+-RNA prepared from isolated calf liver polysomes by deproteinization and affinity chromatog. on oligo(dT)-Sephadex at pH 6 contains low-mol.-weight peptides (600-1500 daltons) bound noncovalently. These peptides were extracted from the poly(A)+-RNA-peptides complex by precipitation of the nucleic acids with 80% EtOH at alkaline pH (9.5) and purified on Sephadex G-25 and G-15 columns. Further fractionation was performed by silica gel chromatog. and HPLC. The amino acid composition of the isolated peptidic fraction was compared with similar peptides obtained from rat liver, rabbit reticulocyte, and calf thymus polysomes. Effluent (ribosomal) RNA contains only a negligible amount of peptides. Isolated polysomal RNA peptides, named deprimerones, have a general depressing effect on gene expression in vitro (Hillar, M.; Przyjemski, J., 1979). Isolated deprimerones not only inhibit DNA transcription and RNA translation in reconstituted cell-free systems, but also DNA replication by DNA polymerase  $\beta$  with single- and double-stranded DNA template and synthetic deoxyribonucleotide polymers. The inhibitory effect on replication was correlated with the inhibition of [3H]deoxyribonucleotide incorporation into isolated chromatin and in stimulated lymphocyte cell cultures. The isolated deprimerones are characterized by similar amino acid compns. in various species.

L31 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1985:55799 HCAPLUS Full-text  
DOCUMENT NUMBER: 102:55799  
TITLE: Opposing effects of the polycation hexadimethrine  
(polybrene) on normal and leukemic lymphocytes  
AUTHOR(S): Patt, Leonard M.; Houck, John C.  
CORPORATE SOURCE: Immunogenics Corp., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1985), 30(2), 109-14  
CODEN: PHMGBN; ISSN: 0031-7012  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The polycationic compound hexadimethrine bromide [28728-55-4] had opposing effects on normal and leukemic murine lymphocytes. This polycation stimulated the DNA-synthetic response of murine spleen cells to alloantigens, whereas, at the same concentration, proliferation of the leukemic cell line, L1210, was inhibited. Other polycations tested did not show this effect. The hexadimethrine had no significant effect on the rejection rate of histo-incompatible skin grafts in mice. Low concns. inhibited the growth of the L1210 leukemia cells in DBA/2J mice.

L31 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1984:622212 HCAPLUS Full-text  
DOCUMENT NUMBER: 101:222212  
TITLE: Opposing effects of the polycation hexadimethrine  
(polybrene) on normal and leukemic lymphocytes  
AUTHOR(S): Patt, Leonard M.; Houck, John C.  
CORPORATE SOURCE: Immunogenics Corp., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1985), 30(1), 55-60  
CODEN: PHMGBN; ISSN: 0031-7012

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The polycationic compound hexadimethrine Br [28728-55-4] has opposing effects on normal and leukemic murine lymphocytes. This polycation significantly stimulated the DNA-synthetic response of murine spleen cells to alloantigens, whereas, at the same concentration, proliferation of the leukemic cell line, L1210, was inhibited. Other polycations tested did not show this effect. The hexadimethrine had no significant effect on the rejection rate of histoincompatible skin grafts in mice. Low concns. did inhibit the growth of the L1210 leukemia cells in DBA/2J mice.

L31 ANSWER 16 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1984:405481 HCAPLUS Full-text  
DOCUMENT NUMBER: 101:5481  
TITLE: Immune stimulator  
INVENTOR(S): Houck, John C.; Patt, Leonard M.  
PATENT ASSIGNEE(S): Endorphin, Inc., USA  
SOURCE: PCT Int. Appl., 49 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 8401090	A1	19840329	WO 1983-US1439	19830916
W: AU, DK, FI, JP, NO				
RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
AU 8320798	A	19840404	AU 1983-20798	19830916
JP 59501786	T	19841025	JP 1983-503297	19830916
EP 122926	A1	19841031	EP 1983-903269	19830916
R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE				
DK 8402494	A	19840521	DK 1984-2494	19840521
FI 8402032	A	19840521	FI 1984-2032	19840521
NO 8402015	A	19840521	NO 1984-2015	19840521
US 4571336	A	19860218	US 1985-694899	19850125
PRIORITY APPLN. INFO.:			US 1982-419995	A 19820920
			US 1983-526356	A 19830825
			WO 1983-US1439	A 19830916

AB An immunostimulatory peptide is described which is isolated from bovine thymus tissue and can be used to treat mammals and birds subject to viral or fungus infections. Thus, bovine thymus was extracted with ammonium carbonate, pH 8.5, and after centrifugation the supernatant was lyophilized. The lyophilized powder is extracted with EtOH (50-60% final concentration), and the supernatant is treated with acetone. The material is purified by gel filtration on Sephadex and BioGel. The material during chromatog. seps. into 2 fractions, one with mol. weight .apprx.1400 daltons, the other of 100-1400 daltons. The factor specifically acts on reactions involving T-lymphocytes.

L31 ANSWER 17 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1983:447935 HCAPLUS Full-text  
DOCUMENT NUMBER: 99:47935  
TITLE: Role of polypeptide growth factors in normal and abnormal growth  
AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, USA  
SOURCE: Kidney International (1983), 23(4), 603-10  
CODEN: KDYIA5; ISSN: 0085-2538  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review with 134 refs. is given on the influence of polypeptide growth factors on animal growth, including both the increase in number of cells (hyperplasia) and the enlargement and extension of individual cells (hypertrophy). The actions of growth factors are considered on normal growth and development, injury repair, and neoplastic growth.

L31 ANSWER 18 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:119342 HCAPLUS Full-text

DOCUMENT NUMBER: 98:119342

TITLE: Inhibition of normal and leukemic lymphocyte proliferation by compound 48/80

AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Biochemical Pharmacology (1983), 32(3), 565-7

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Compound 48/80 and other low mol. weight polycations were potent inhibitors of normal and leukemic lymphocyte proliferation. On a molar basis these polycations were as active as polylysine [25104-18-1] or hexadimethrine bromide [28728-55-4], polycations many times larger. It appears that certain low mol. weight polycations have a mol. shape or size which makes them more potent inhibitors of proliferation than their degree of cationic property would indicate. Low mol. weight polycations may provide a route to new antimitotic or immunosuppressive drugs.

L31 ANSWER 19 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:613611 HCAPLUS Full-text

DOCUMENT NUMBER: 97:213611

TITLE: Inhibition of lymphocyte DNA-synthetic responses by spermine-derived polycations

AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.;  
Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Biochemical Pharmacology (1982), 31(14), 2353-60

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Some spermine-derived polycations were chemical synthesized by reaction of spermine with glutaraldehyde followed by reduction of the resulting Schiff base with NaBH<sub>4</sub>. Their migration on ion-exchange and gel filtration columns was consistent with the formation of polycations with properties similar to those reported for the spontaneous reaction products. When added to cultures of alloantigen- or mitogen-stimulated lymphocytes, these polycations were potent inhibitors of the incorporation of [3H]thymidine and blast cell formation. This inhibition was reversible, noncytotoxic, and only apparent if the polycation was added early in the culture period. The concentration of polycation necessary to achieve 50% inhibition of the lymphocyte response decreased as the cationic nature relative to spermine increased.

L31 ANSWER 20 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1982:83786 HCAPLUS Full-text  
DOCUMENT NUMBER: 96:83786  
TITLE: Lymphocyte chalone: fact or artifact?  
AUTHOR(S): Houck, J. C.; Patt, L. M.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Lymphokines (1981), 4, 35-68  
CODEN: LMPKD9; ISSN: 0277-013X  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
AB A review with 97 refs.

L31 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1982:50564 HCAPLUS Full-text  
DOCUMENT NUMBER: 96:50564  
TITLE: Low molecular weight inhibitors of lymphocyte transformation. II. Biological specificity  
AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.;  
Houck, John C.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1982), 24(2), 74-81  
CODEN: PHMGBN; ISSN: 0031-7012  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Exts. of calf thymus contain a number of inhibitors of lymphocyte transformation. A low mol. weight (600 daltons) anionic inhibitor of lymphocyte transformation was identified and separated from contaminating polyamines and nucleotides. The active fraction inhibited the DNA synthetic response of murine or human T cells to alloantigens in mixed lymphocyte culture and to T-cell-specific mitogens. It was inactive against stimulation of B lymphocytes and several cultured tumor cell lines.

L31 ANSWER 22 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1981:584717 HCAPLUS Full-text  
DOCUMENT NUMBER: 95:184717  
TITLE: Pulmonary polyamine permeability factor  
AUTHOR(S): Gleisner, John M.; Patt, Leonard M.;  
Ramthun, Carol A.; Houck, John C.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Inflammation (New York, NY, United States) (1981),  
5(2), 127-36  
CODEN: INFLD4; ISSN: 0360-3997  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Acid exts. of calf lung contain low-mol.-weight factors which increase the permeability of the microcirculation when injected into the skin of rats. These factors, which were present in very low levels in aqueous exts., were purified by gel filtration and ion-exchange chromatog. High-voltage paper electrophoresis revealed 2 active compds. with mobilities identical to the polyamines spermine and spermidine. Authentic samples of these compds. were as active in the blueing reaction as the isolated compds. The permeability activity of both the isolated factors and the synthetic compds. was inhibited by pepstatin and by pretreatment of the animals with pyrilamine maleate. If the normally low extracellular levels of these polyamines is increased by tissue damage, they could increase vascular permeability within the lung by releasing histamine from adjacent mast cells.

L31 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:546303 HCAPLUS Full-text

DOCUMENT NUMBER: 95:146303

TITLE: Abnormal behavior of polyamines on gel filtration: a cautionary note

AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.; Gleisner, John M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Cell Biology International Reports (1981), 5(8), 797-803

CODEN: CBRPDS; ISSN: 0309-1651

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The polyamines, spermine and spermidine, persist in various tissue exts. despite procedures such as dialysis and ultrafiltration which normally remove such low-mol.-weight compds. Polyamines in tissue exts. and the standard compds. alone can migrate as much higher mol. weight compds. on gel filtration on Sephadex G 25, G 10, and G 15, and Bio-Gel P 6 under a variety of conditions. Thus, even relatively pure fractions obtained from tissue exts. may be contaminated with, or consist entirely of, polyamines, which are potent inhibitors of cell proliferation under certain conditions.

L31 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:495304 HCAPLUS Full-text

DOCUMENT NUMBER: 95:95304

TITLE: Low molecular weight inhibitors of lymphocyte transformation

AUTHOR(S): Patt, Leonard M.; Gleisner, John M.; Barrantes, Denny M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, USA

SOURCE: Pharmacology (1981), 23(3), 117-27

CODEN: PHMGBN; ISSN: 0031-7012

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A variety of factors isolated from bovine thymus inhibited the transformation of human and mouse lymphocytes. The majority of this activity fractionates as low mol. weight material by ultrafiltration or column chromatog. Three distinct fractions of low mol. weight were isolated. One fraction contains the spermine and spermidine. A 2nd fraction contains thymidine or thymidine-like nucleotides. The 3rd fraction appears to be polypeptide in nature, has an estimated mol. weight of 500-600, is heat and pH stable, and is easily extracted by solns. containing organic solvents. Preliminary steps in the isolation of this inhibitor are presented, and its relation to other immunosuppressive and anti-mitotic agents is discussed.

L31 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:478160 HCAPLUS Full-text

DOCUMENT NUMBER: 95:78160

TITLE: Biosynthesis of glycolipids in normal NRK line cells and those cells transformed by oncornavirus B77 and its temperature-sensitive mutants LA 25 and LA 31

AUTHOR(S): Baglei, E. A.; Hakomori, S. I.; Patt, L.; Fogt, P. N.

CORPORATE SOURCE: Inst. Probl. Onkol., Kiev, USSR

SOURCE: Virusy Raka Leikoza (1979), 156-8. Editor(s):  
Zhdanov, V. M.; Tikhonenko, T. I. Akad. Med. Nauk  
SSSR, Inst. Virusol. im. D. I. Ivanovskogo: Moscow,  
USSR.

CODEN: 45WQA9

DOCUMENT TYPE: Conference

LANGUAGE: Russian

AB Transformation of NRK cells by oncovirus B77 was accompanied by 1.9, 1.7, 6.6, and 6.0-fold decreases in  $\beta$ -galactosylceramide, hematoside, trihexosylceramide, and globoside biosynthesis, resp. Hematoside formation in cells infected with LA 25 virus at 32° (i.e. the temperature at which the transformed phenotype is expressed) was 2.2 and 3.0-fold lower than that observed in B77 and LA 31 virus-transformed cells, resp. Globoside formation in LA 25-transformed cells was 3.0-fold lower than in B77-transformed cells and 5.0-fold greater than in LA 31-transformed cells. At 39° (i.e. the temperature at which the normal phenotype is expressed), hematoside and globoside formation was increased in LA 25- and LA 31-infected cells when compared with B77-transformed cells.

L31 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:26169 HCAPLUS Full-text

DOCUMENT NUMBER: 94:26169

TITLE: The incredible shrinking chalone

AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: FEBS Letters (1980), 120(2), 163-70

CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 85 refs., of the chemical nature of chalones and problems in their purification. The much smaller mol. wts. of purified chalones compared with those previously determined with unpurified samples is demonstrated and shown to be caused by binding of other mols., especially polyamines, to the chalones. Data on lymphocyte and granulocyte chalones (mol. wts. approx. 600-700) are emphasized.

L31 ANSWER 27 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:616730 HCAPLUS Full-text

DOCUMENT NUMBER: 93:216730

TITLE: Glycosylation of viral envelope components

AUTHOR(S): Grimes, W. J.; Irwin, G. N.; Patt, L. M.

CORPORATE SOURCE: Dep. Biochem., Univ. Arizona, Tucson, AZ, USA

SOURCE: Cell Membr. Viral Envelopes (1980), Volume 2, 541-56.

Editor(s): Blough, H. A.; Tiffany, John Michael.

Academic: London, Engl.

CODEN: 44LMA3

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 84 refs. of cellular complex polysaccharide biosynthesis and viral glycosylation.

L31 ANSWER 28 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:510189 HCAPLUS Full-text

DOCUMENT NUMBER: 93:110189

TITLE: Notes on improved procedures for the chemical

modification and degradation of glycosphingolipids  
 AUTHOR(S): MacDonald, D. L.; Patt, L. M.; Hakomori, S.  
 CORPORATE SOURCE: Div. Biochem. Oncol., Fred Hutchinson Cancer Res.  
 Cent., Seattle, WA, 98104, USA  
 SOURCE: Journal of Lipid Research (1980), 21(5), 642-5  
 CODEN: JLPRAW; ISSN: 0022-2275  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Some simplified and efficient procedures are described for the chemical  
 modifications of glycosphingolipids. The olefinic bond of the ceramide moiety  
 of the acetylated glycolipid was quant. oxidized with OsO<sub>4</sub> and HIO<sub>4</sub>.  
 Treatment of the resulting glycolipid aldehyde with NaOMe resulted in the  
 release of the intact oligosaccharide. The yield of oligosaccharides under  
 the new condition was much higher than previously found. The olefinic bond  
 was also oxidized to a carboxyl function by either of 2 methods: (a) the  
 aldehyde group resulting from the above oxidation was further oxidized with  
 performic acid and (b) the olefinic bond of the fully acetylated glycolipid  
 was oxidized directly to the acid by KMnO<sub>4</sub> in Me<sub>2</sub>CO. The Me ester of the  
 carboxyl group of the sialic acid in gangliosides can be formed with  
 diazomethane in MeOH-ether after treatment of the gangliosides with Dowex-50  
 (H<sup>+</sup> form). Possible uses of these glycolipid modifications are discussed.

L31 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1980:405095 HCAPLUS Full-text  
 DOCUMENT NUMBER: 93:5095  
 TITLE: Cell biological and immunological significance of  
 ganglioside changes associated with transformation  
 AUTHOR(S): Hakomori, Senichiro; Young, William W., Jr.;  
 Patt, Leonard M.; Yoshino, Teruo; Halfpap,  
 Laurel; Lingwood, Clifford A.  
 CORPORATE SOURCE: Fred Hutchinson Cancer Res. Cent., Univ. Washington,  
 Seattle, WA, 98104, USA  
 SOURCE: Advances in Experimental Medicine and Biology (1980),  
 125(Struct. Funct. Gangliosides), 247-61  
 CODEN: AEMBAP; ISSN: 0065-2598  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 AB A review with 26 refs. of ganglioside alterations in oncogenic transformation.

L31 ANSWER 30 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1978:573414 HCAPLUS Full-text  
 DOCUMENT NUMBER: 89:173414  
 TITLE: Retinol induces density-dependent growth inhibition  
 and changes in glycolipids and LETS  
 AUTHOR(S): Patt, Leonard M.; Itaya, Koichi; Hakomori,  
 Senitiroh  
 CORPORATE SOURCE: Dep. Biochem. Oncol., Fred Hutchinson Cancer Res.  
 Cent., Seattle, WA, USA  
 SOURCE: Nature (London, United Kingdom) (1978), 273(5661),  
 379-81  
 CODEN: NATUAS; ISSN: 0028-0836  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Culturing hamster fibroblasts NIL or mouse 3T3 cells in medium containing  
 retinol [68-26-8] (20 nmol/mL) enhanced, whereas medium with UV-irradiated  
 serum reduced, contact orientation and cell-d. dependent inhibition of cell

growth. Associated changes of cell surface membrane GM3 level, stimulation of hematoside formation, ganglioside contact response, and in LETS were observed. The ability of vitamin A compds. to prevent carcinogenesis may be related to changes in surface membrane glycolipids and glycoproteins.

L31 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:197544 HCAPLUS Full-text

DOCUMENT NUMBER: 88:197544

TITLE: Interactions of nonionic surfactants with tyrothricin.  
Part 3: Localization of tyrothricin in the surfactant micelle

AUTHOR(S): Ullmann, E.; Thoma, K.; Patt, L.

CORPORATE SOURCE: Inst. Pharm. Lebensmittelschem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.

SOURCE: Tenside Detergents (1978), 15(1), 9-13

CODEN: TSDTAZ; ISSN: 0040-3490

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Detns. of the partition behavior of tyrothricin [1404-88-2] between H<sub>2</sub>O and micelles of several polyethylene glycol fatty acid esters and fatty alc. ethers, as well as studies of the effect of these nonionic surfactants on the UV absorption spectrum of tyrocidine, the principal component of tyrothricin, indicated that both the hydrophilic and the hydrophobic areas of the surfactants are involved in binding tyrothricin. The binding of tyrothricin (and therefore the capacity of the detergents to solubilize it) increases with increasing size of both the hydrophilic and hydrophobic components, although the influence of the hydrophilic component predominates. This explains the various degrees of inhibition of tyrothricin's antibiotic activity by different nonionic surfactants.

L31 ANSWER 32 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:141578 HCAPLUS Full-text

DOCUMENT NUMBER: 88:141578

TITLE: Interactions of nonionic surfactants with tyrothricin.  
Part II. Physicochemical properties of thyrothricin and the solubilizing capacity of surfactants

AUTHOR(S): Thoma, K.; Ullmann, E.; Patt, L.

CORPORATE SOURCE: Inst. Pharm. Lebensmittelschem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.

SOURCE: Tenside Detergents (1977), 14(6), 297-300

CODEN: TSDTAZ; ISSN: 0040-3490

DOCUMENT TYPE: Journal

LANGUAGE: German

AB The solubility of tyrothricin [1404-88-2] in water (74 mg %) is due primarily to the amphophilic character of its principal component, tyrocidine [19659-41-7], whereas the other component gramicidin [1405-97-6], is more lipophilic. Tyrocidine decreases the surface tension of water to a min. of 40.7 dynes/cm, and forms micelles in water with a critical micelle-forming concentration of  $2.6 \times 10^{-4} M$ . On the contrary, gramicidin has little effect on the surface tension and does not undergo association. Polyethylene glycol esters and ethers increase the water solubility of tyrothricin; the most effective is polyethylene glycol 400 lauryl ether [9002-92-0]. Antibacterial activity is lost in parallel with the increase in solubility.

L31 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN



ACCESSION NUMBER: 1977:594742 HCAPLUS Full-text  
DOCUMENT NUMBER: 87:194742  
TITLE: Interactions of non-ionic surfactants with  
tyrothricin. I: Investigation on their effect on the  
antibiotic activity  
AUTHOR(S): Thoma, Karl; Ullmann, Elsa; Patt, L.  
CORPORATE SOURCE: Inst. Pharm. Lebensmittelchem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.  
SOURCE: Tenside Detergents (1977), 14(5), 266-70  
CODEN: TSDTAZ; ISSN: 0040-3490  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB With the exception of polyethylene glycol 400 lauryl ether [9002-92-0] (1%),  
which was inhibitory, a series of polyethylene glycol fatty acid esters and  
ethers did not, when tested alone, affect the proliferation rate of  
Staphylococcus aureus in vitro. However, most of the compds. interfered with  
the antibacterial action of tyrothricin [1404-88-2]. In the series of  
polyethylene glycol 400-4700 stearates, the interference with tyrothricin's  
antibacterial activity decreased with increasing chain length of the  
polyethylene glycol component. In contrast, lengthening the fatty acid ester  
chain of polyethylene glycol 900 sorbitan fatty esters from laurate to  
stearate enhanced the tyrothricin-inhibitory action. Polyethylene glycol 400  
lauryl ester [9004-81-3] and ether interfered only slightly with tyrothricin.  
Other data are given relative to the effect of the detergents' amphiphilic  
composition or tyrothricin activity, and the consequences of using such  
detergents as solubilizing adjuvants in tyrothricin-containing pharmaceutical  
preps. are discussed.

L31 ANSWER 34 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:111134 HCAPLUS Full-text  
DOCUMENT NUMBER: 86:111134  
TITLE: Solvent residues in film-coated tablets and isolated  
film coatings  
AUTHOR(S): Patt, L.; Hartmann, V.  
CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.  
SOURCE: Pharmazeutische Industrie (1976), 38(10), 902-6  
CODEN: PHINAN; ISSN: 0031-711X  
DOCUMENT TYPE: Journal  
LANGUAGE: German

AB The amts. of solvent residues measured gas chromatog. in placebo tablets  
coated with the gastric juice-resistant coating, HP-50  
(hydroxypropylmethylcellulose phthalate) [9050-31-1], or water-soluble films  
of Ethocel N 10 (ethylcellulose) [9004-57-3], Methocel 60 HG  
(hydroxypropylmethylcellulose) [9004-65-3] and Kollidon 25  
(polyvinylpyrrolidone) [9003-39-8] and in samples of isolated coating material  
depended on the solvent used and also on the coating apparatus, spraying  
technique, core porosity, and drying conditions. Solvent residues were  
minimized by drying first in the coating apparatus and then at room  
temperature at 30°, by using an apparatus with maximum air flow, and by using  
a low porosity core. EtOH [64-17-5], Me<sub>2</sub>CO [67-64-1], MeOH [67-56-1], and  
CH<sub>2</sub>Cl<sub>2</sub> [75-09-2] left smaller residues than iso-PrOH [67-63-0].

L31 ANSWER 35 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:520369 HCAPLUS Full-text  
DOCUMENT NUMBER: 85:120369  
TITLE: Formation of mannosyl-lipids by an

ectomannosyltransferase in suspensions of BALB/c fibroblasts

AUTHOR(S): Patt, Leonard M.; Grimes, William J.  
 CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
 SOURCE: Biochimica et Biophysica Acta, General Subjects  
 (1976), 444(1), 97-107  
 CODEN: BBGSB3; ISSN: 0304-4165

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB A mannosyltransferase was detected in suspensions of BALB/c fibroblasts incubated with GDP-mannose-14C. Exptl. evidence indicated the cell surface as the most likely site for the enzyme. The transferase synthesizes both glycolipids and glycoproteins. The lipid compds. have properties suggestive of lipid-linked mono- and oligosaccharides which can function as intermediates in glycoprotein synthesis. The formation of these compds. by a cell surface enzyme suggested that lipid-linked intermediates may play an important role in the glycosylation of membrane components.

L31 ANSWER 36 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:505792 HCAPLUS Full-text  
 DOCUMENT NUMBER: 85:105792  
 TITLE: The ectoglycosyltransferases of cultured animal cells  
 AUTHOR(S): Patt, Leonard M.  
 CORPORATE SOURCE: Univ. Arizona, Tucson, AZ, USA  
 SOURCE: (1976) 155 pp. Avail.: Xerox Univ. Microfilms, Ann Arbor, Mich., Order No. 76-16,232  
 From: Diss. Abstr. Int. B 1976, '37(1), 201-2  
 DOCUMENT TYPE: Dissertation  
 LANGUAGE: English  
 AB Unavailable

L31 ANSWER 37 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:119692 HCAPLUS Full-text  
 DOCUMENT NUMBER: 84:119692  
 TITLE: Ectogalactosyltransferase studies in fibroblasts and concanavalin A-stimulated lymphocytes  
 AUTHOR(S): Patt, Leonard M.; Endres, Robert O.; Lucas, David O.; Grimes, William J.  
 CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
 SOURCE: Journal of Cell Biology (1976), 68(3), 799-802  
 CODEN: JCLBA3; ISSN: 0021-9525  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Suspensions of concanavalin A-stimulated mouse spleen cells incorporated label from exogenous UDP-galactose-14C. No ectogalactosyltransferases were present. The spleen cells degraded the nucleotide sugar, releasing galactose which was used for complex carbohydrate synthesis within the cell. BALB/c 3T3 cells and SV40-transformed 3T3 cells in suspension showed an ectogalactosyltransferase capable of transferring the carbohydrate moiety of UDP-galactose to endogenous acceptor mols.

L31 ANSWER 38 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:15065 HCAPLUS Full-text  
 DOCUMENT NUMBER: 84:15065  
 TITLE: Ectoglycosyltransferase activity in suspensions and

monolayers of cultured fibroblasts  
AUTHOR(S): Patt, Leonard M.; Grimes, William J.  
CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
SOURCE: Biochemical and Biophysical Research Communications  
(1975), 67(1), 483-90  
CODEN: BBRCA9; ISSN: 0006-291X  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Fibroblasts suspended by a brief exposure to EDTA had the ability to transfer the carbohydrate moiety of exogenous nucleotide-sugars to endogenous acceptors (ectoglycosyltransferase activity). Monolayers of the same cells did not have this ability. Both suspensions and monolayers could transfer carbohydrate to exogenous glycosyl acceptors. The cells could glycosylate exogenous desialized,  $\beta$ -galactosidase treated fetuin, utilizing either UDP-galactose-14C a direct donor or galactose-3H as a precursor to a glycosyl donor.

L31 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:96279 HCAPLUS Full-text  
DOCUMENT NUMBER: 82:96279  
TITLE: Comparison of glycosyltransferase activities and malignant properties in normal and transformed cells derived from BALB/c mice

AUTHOR(S): Patt, Leonard M.; Van Nest, Gary A.; Grimes, William J.

CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
SOURCE: Cancer Research (1975), 35(2), 438-41  
CODEN: CNREA8; ISSN: 0008-5472

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The ability of suspensions of BALB/c cells to catalyze the incorporation of nucleotide sugars into complex polysaccharides was compared. These cells had previously been characterized for concanavalin A-induced agglutinability, tumorigenicity, and malignancy. All of the cell lines tested catalyzed transfer of the sugar moieties of CMP-N-acetylneuraminic acid, galactose, UDP-N-acetylgalactosamine, UDP-N-acetylglucosamine, UDP-glucose, and GDP-mannose to glycoproteins and glycolipids. While some transformed lines exhibited alterations in transferase levels, others could not be distinguished from normal cells. Normal cells, transformed cells that caused tumors that regressed, and transformed cells that caused tumors that killed an immunol. competent host showed growth-dependent changes in transferase activities. Determining the ability to catalyze carbohydrate transfer is insufficient for predicting the tumorigenic and malignant properties of a cell line.

L31 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:502766 HCAPLUS Full-text  
DOCUMENT NUMBER: 81:102766  
TITLE: Cell surface glycolipid and glycoprotein glycosyltransferases of normal and transformed cells

AUTHOR(S): Patt, Leonard M.; Grimes, William J.

CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
SOURCE: Journal of Biological Chemistry (1974), 249(13), 4157-65  
CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Normal and transformed mouse fibroblasts catalyzed transfer of sialic acid, galactose, N-acetylgalactosamine, N-acetylglucosamine, glucose, and mannose from nucleotide sugar donors to glycolipids and glycoproteins. The enzyme activity was associated with intact cells. Kinetic parameters and optimal ion concns. were determined for the glycosyltransferase activities detected when whole cells were incubated with nucleotide sugar. Homogenization of cells either decreased or did not change the activity observed. Adding unlabeled sugars did not affect incorporations. Trypsin caused a 50% inhibition of observable activity only when present in concns. which also caused significant cell destruction. Swiss SV40 transformed cells showed decreased sialic acid-transferring ability compared to the parent cell line. Swiss Py3T3 and SV3T3 cells had reduced ability to catalyze transfer of N-acetylgalactosamine to glycolipids compared with the normal cell line. Since these alterations have also been reported in homogenates of these cells, and in view of the large number of glycosyltransferase activities observed, the in vitro whole cell reactions probably detect the normal cellular systems which are in the process of synthesizing glycoproteins and glycolipids. Evidence supporting this conclusion was obtained from expts. in which glycolipid products synthesized in cells incubated in the presence of galactose-3H and UDP-galactose-14C were compared.

L31 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:124708 HCAPLUS Full-text

DOCUMENT NUMBER: 80:124708

TITLE: Optimizing film-coating systems using contact angle measurements

AUTHOR(S): Ehrhardt, Lothar; Patt, L.; Schindler, E.

CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.

SOURCE: Pharmazeutische Industrie (1973), 35(11), 719-22

CODEN: PHINAN; ISSN: 0031-711X

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Expts. were conducted to optimize film coating systems on various tablet surfaces. The influence of film formers, solvents, pigment concentration, and tablet porosity were investigated as well as the correlation between the contact angle and the roughness of the film. The measurement of contact angles on tablet surfaces offers good facilities for selecting appropriate film coating systems and correlation is given between the contact angle and the quality of the resulting film-surfaces on the tablets.

L31 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:101960 HCAPLUS Full-text

DOCUMENT NUMBER: 78:101960

TITLE: Comparative studies of enzyme activities of some pancreatin preparations

AUTHOR(S): Ehrhardt, L.; Hartmann, V.; Patt, L.

CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.

SOURCE: Deutsche Apotheker Zeitung (1972), 112(50), 2005-9

CODEN: DAZE2; ISSN: 0011-9857

DOCUMENT TYPE: Journal

LANGUAGE: German

AB A comparative investigation of 8 different pancreatin prepns. with respect to their onset of action their resistance to gastric juice, their disintegration time, their release rate, and their digestive activity was conducted. Three of the 8 prepns. were film-coated. In these prepns. no visible change could be determined during incubation in artificial gastric juice. Two other

prepns. were also film-coated, but the film became permeable to gastric juice. The remaining 3 prepns. were softened and partially dissolved, resp. The release rates during the first hr of the experiment were low in 7 prepns. After this time the release rates of lipase activity increased markedly. The digestive activity was calculated from lipase release rate, which was low except in 1 preparation during the first hr and increased later. The results obtained with these in vitro expts. were confirmed by expts. performed in vivo.

L31 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1942:34347 HCAPLUS  
 DOCUMENT NUMBER: 36:34347  
 ORIGINAL REFERENCE NO.: 36:5350d  
 TITLE: Segmental abrasive wheel for pulp grinding  
 INVENTOR(S): Patt, Leon A.  
 PATENT ASSIGNEE(S): The Carborundum Co.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	US 2279486		19420414	US 1939-309217	19391214
AB	Various structural, mech. and operative details of an apparatus for preparing wood pulp.				

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FILE 'REGISTRY' ENTERED AT 15:27:07 ON 19 JUL 2007

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L7 118245 SEA ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA ABB=ON PLU=ON EPIGALLOCATECH?

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L12 1 SEA ABB=ON PLU=ON L9 AND L10 AND L11  
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D IBIB ABS HITSTR L12 1  
L13 7 SEA ABB=ON PLU=ON L9 AND L11  
D STAT QUE L13  
D IBIB ABS HITSTR L13 1-7  
L18 232 SEA ABB=ON PLU=ON L11 AND L10

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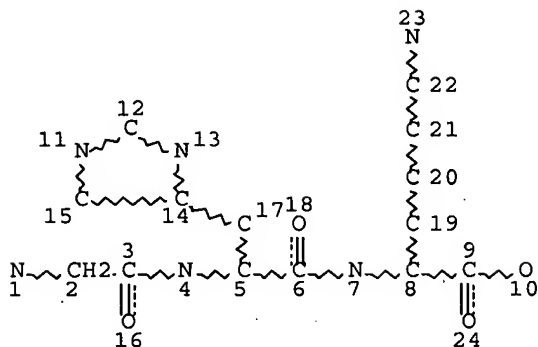
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L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP  
L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
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L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:142983 HCAPLUS Full-text  
DOCUMENT NUMBER: 140:187411  
TITLE: Compositions containing peptide copper complexes and phytochemical compounds, and methods related thereto  
INVENTOR(S): Patt, Leonard M.  
PATENT ASSIGNEE(S): Procyte Corporation, USA  
SOURCE: PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004014413 A1 20040219 WO 2003-US23293 20030724  
 WO 2004014413 A8 20040521  
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 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
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 AU 2003256797 A1 20040225 AU 2003-256797 20030724  
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 EP 1545579 A1 20050629 EP 2003-784817 20030724  
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PRIORITY APPLN. INFO.: US 2002-400318P P 20020731  
 WO 2003-US23293 W 20030724

AB Compns. having antioxidant, anti-inflammatory and/or cosmetic utility for a mammal, combining at least one peptide copper complex and at least one phytochem. compound are described. More particularly, the phytochem. compound is a polyphenol or a carotenoid, the polyphenol being a flavanoid, a flavonoid, a flavonoid derivative, a flavolignan, a polyphenolic rhizome, or their mixts. Compns. for topical application include additives such as emollients, sunscreen agents, skin protectants, skin conditioning agents, and humectants. Methods, employing such compns., are described for enhancing or restoring the resistance of a mammal to oxidative or inflammatory damage, for accelerating wound healing, for cosmetically healing mammalian skin, and for stimulating hair growth, or preventing or treating hair loss. For example, a moisturizing lotion contained water 74%, glycerin 1.0%, xanthan gum 0.50%, diisopropyl adipate 4.0%, isocetyl stearate 6.0%, octyl palmitate 10.0%, glyceryl stearate 1.0%, cetyl alc. 1.0%, stearyl alc. 0.8%, behenyl alc. 0.5%, palmitic acid 0.3%, stearic acid 0.25%, glycyl-L-histidyl-L-lysine-copper complex 0.2%, catechin 0.01%, gallocatechin 0.01%, epicatechin 0.01%, propylene glycol 0.55%, diazolidinylurea 0.03%, and iodopropynyl Bu carbonate 0.02%. The formulation is beneficial as the phytochem. compound provides anti-inflammatory action to the skin in addition to the anti-inflammatory and tissue rebuilding activity provided by the presence of the copper peptide compound

IT 970-74-1, Epigallocatechin 989-51-5,  
 Epigallocatechin gallate 7440-50-8D, Copper,  
 peptide complexes 49557-75-7D, Glycyl-L-  
 histidyl-L-lysine, derivs., copper(II)  
 complexes

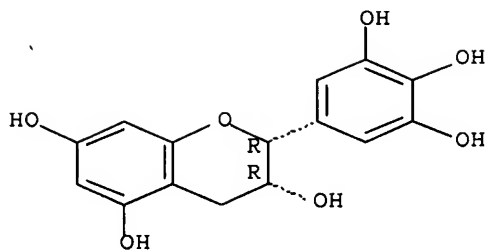
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)

(compns. containing peptide-copper complexes and phytochem.  
 compds. having antioxidant and anti-inflammatory activities)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,  
 (2R,3R)- (CA INDEX NAME)

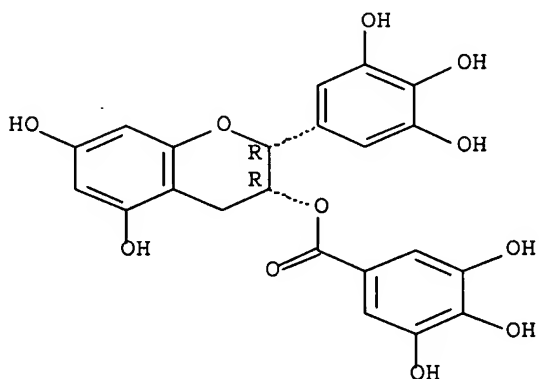
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 7440-50-8 HCAPLUS

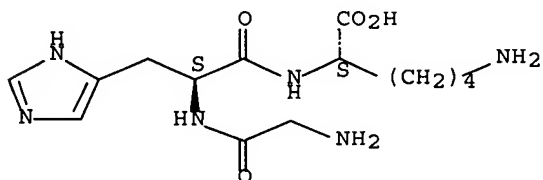
CN Copper (CA INDEX NAME)

Cu

RN 49557-75-7 HCAPLUS

CN L-Lysine, glycy-L-histidyl- (CA INDEX NAME)

Absolute stereochemistry.

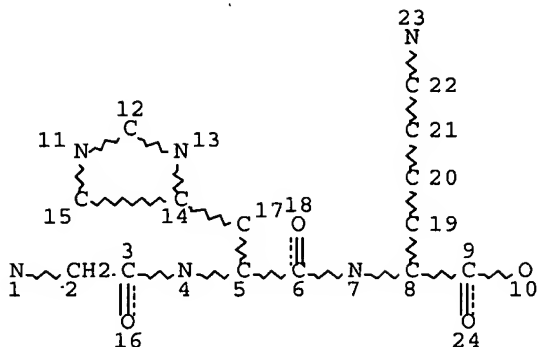


REFERENCE COUNT:

11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L3 STR



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 24

## STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3

L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP

L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?

L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
S?

L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?

L13 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11

=&gt;

=&gt; d ibib abs hitstr l13 1-7

L13 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:494280 HCAPLUS Full-text

DOCUMENT NUMBER: 144:483523

TITLE: Gene encoding methylated catechin synthase from tea  
and usesINVENTOR(S): Yamamoto, Mari; Kirita, Masanobu; Sami, Manabu; Ikeda,  
MitsuoPATENT ASSIGNEE(S): National Agriculture and Bio-Oriented Research  
Organization, Japan; Asahi Breweries, Ltd.

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006054500 A1 20060526 WO 2005-JP20793 20051114  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,  
 SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,  
 YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

JP 2006141242 A 20060608 JP 2004-333290 20041117

PRIORITY APPLN. INFO.: JP 2004-333290 A 20041117

OTHER SOURCE(S): MARPAT 144:483523

AB The present invention provides a methylated catechin synthase (catechin methyltransferase) gene by which methylated catechin having a high antiallergic activity can be efficiently biosynthesized. The enzyme methylates epigallocatechin-3-O-gallate or epicatechin-3-O-gallate to produce the resp. methylated derivs. The inventors cloned a gene encoding a methylated catechin synthase and recombinantly expressed in *Escherichia coli*. The enzyme was characterized for substrate specificity.

IT 887521-98-4 887521-99-5 887522-00-1

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; gene encoding methylated catechin synthase from tea and uses)

RN 887521-98-4 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 887521-99-5 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 887522-00-1 HCAPLUS

CN Catechin methyltransferase (*Camellia sinensis*) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 173484-92-9P, Epigallocatechin-3-O-(3,5-O-dimethyl)gallate 224434-07-5P, Epigallocatechin-3-O-(4-O-methyl)gallate 263369-44-4P, Epigallocatechin-3-O-(3,4-O-dimethyl)gallate

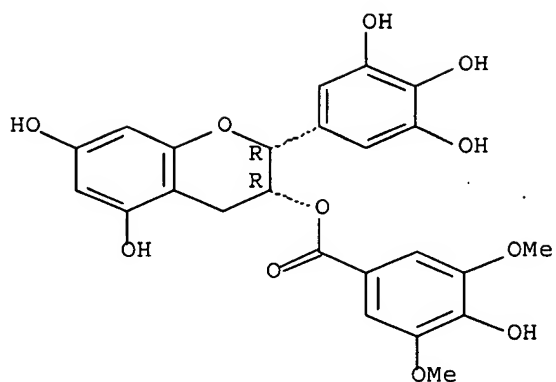
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)

(gene encoding methylated catechin synthase from tea and uses)

RN 173484-92-9 HCAPLUS

CN Benzoic acid, 4-hydroxy-3,5-dimethoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)

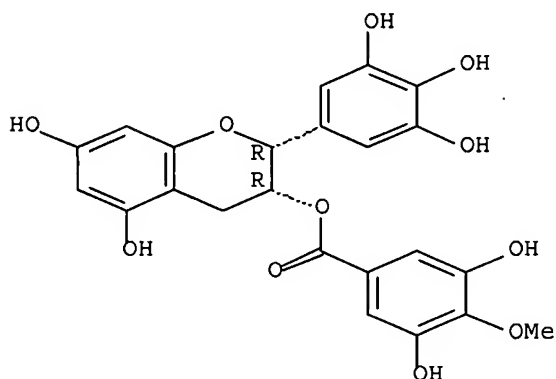
Absolute stereochemistry.



RN 224434-07-5 HCAPLUS

CN Benzoic acid, 3,5-dihydroxy-4-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

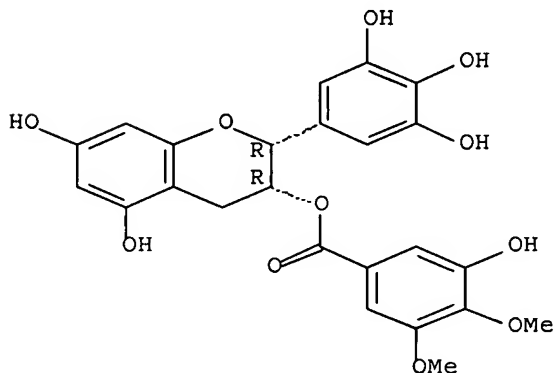
Absolute stereochemistry. Rotation (-).



RN 263369-44-4 HCAPLUS

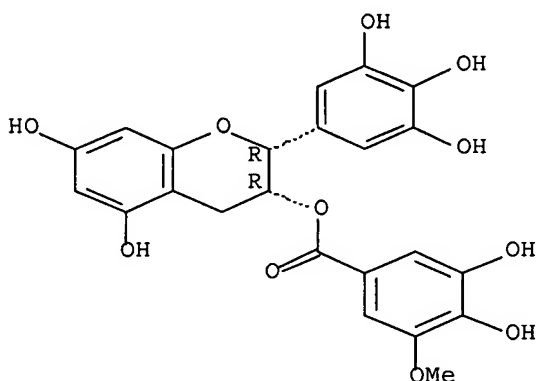
CN Benzoic acid, 3-hydroxy-4,5-dimethoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



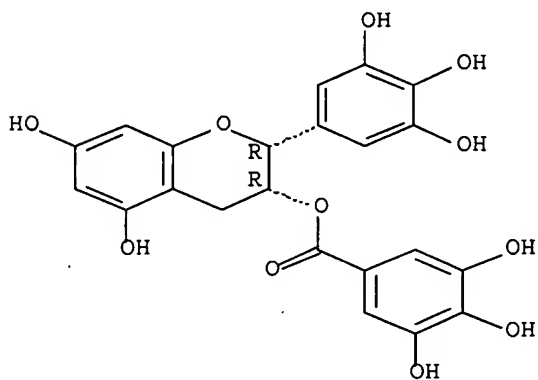
IT 83104-87-4P, **Epigallocatechin-3-O-(3-O-methyl)gallate**  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 BIOL (Biological study); PREP (Preparation)  
 (production of; gene encoding methylated catechin synthase from tea and  
 uses)  
 RN 83104-87-4 HCAPLUS  
 CN Benzoic acid, 3,4-dihydroxy-5-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-  
 2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 989-51-5, **Epigallocatechin-3-O-gallate**  
 RL: BCP (Biochemical process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (substrate, methylation of; gene encoding methylated catechin synthase  
 from tea and uses)  
 RN 989-51-5 HCAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-  
 (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:901955 HCAPLUS Full-text  
 DOCUMENT NUMBER: 143:222528  
 TITLE: Preventing or treating obesity and related disorders  
 using substances that modify and/or stimulate  
 endogenous CD1d antigen function  
 PATENT ASSIGNEE(S): Nestec S.A., Switz.  
 SOURCE: Eur. Pat. Appl., 23 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1566439	A1	20050824	EP 2004-3853	20040220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			EP 2004-3853	20040220

AB The present invention pertains to a method for preventing and/or treating obesity and associated disorders using substances and/or compns. that stimulates and/or modify endogenous CD1d function. The inventors generated CD1d gene knockout mice exhibiting an obese phenotype. A gene expression profiling assay was performed in skin tissue containing the s.c. fat layer from wild-type and CD1d knockout mice. The inventors found that in CD1d knockout mice genes known to be involved in obesity and diabetes mellitus are deregulated. According to another aspect the present invention also provides a method for screening for compds. suitable for use in the method and the composition of the present invention.

IT 478202-71-0, Lipoprotein receptor  
 RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (activity/expression in adipocyte, screening in assay; preventing or treating obesity and related disorders using substances that modify and/or stimulate endogenous CD1d antigen function)

RN 478202-71-0 HCAPLUS

CN Lipoprotein receptor LDL-related protein 1B receptor (human). (CA INDEX NAME)

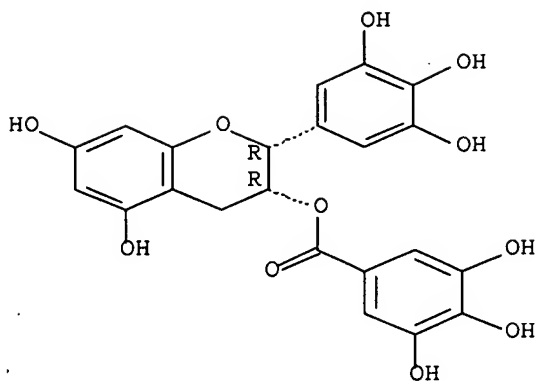
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 989-51-5 989-51-5D, Epigallocatechin  
 -3-gallate, derivs.  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (as anti-obesity agent; preventing or treating obesity and related disorders using substances that modify and/or stimulate endogenous CD1d antigen function)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

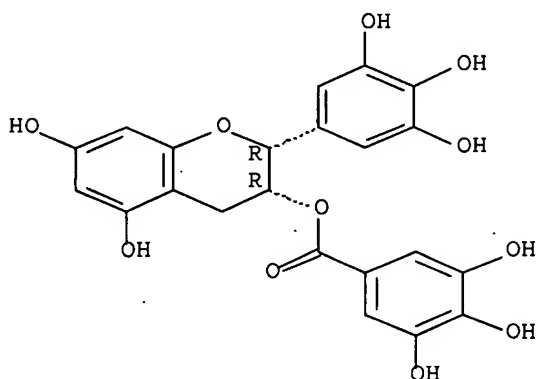
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:485526 HCAPLUS Full-text

DOCUMENT NUMBER: 141:34655

TITLE: Genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase

INVENTOR(S): Dixon, Richard A.; Paiva, Nancy L.; Xie, Deyu; Sharma, Shashi

PATENT ASSIGNEE(S): The Samuel Roberts Noble Foundation, Inc., USA

SOURCE: PCT Int. Appl., 159 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004002215 A2 20040108 WO 2003-US20481 20030630  
 WO 2004002215 A8 20040415  
 WO 2004002215 A3 20050303

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
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 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003247824 A1 20040119 AU 2003-247824 20030630  
 EP 1546335 A2 20050629 EP 2003-762203 20030630

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

NZ 535871 A 20060831 NZ 2003-535871 20030630

PRIORITY APPLN. INFO.: US 2003-392562 A1 20030628  
 US 2002-392562P P 20020628  
 WO 2003-US20481 W 20030630

AB The invention provides method and compns. for the modulation of condensed tannin production in plants. Thus, inhibition of anthocyanin production and introduction formation of condensed tannins is observed in flower petals of tobacco by constitutive expression of the *Medicago truncatula* anthocyanidin reductase (BAN) gene. The BAN gene encodes a novel enzyme of anthocyanidin reductase catalyzing the reduction of anthocyanidins into flavan-3-ols, which can then be polymerized into condensed tannins. BAN coding sequences are identified not only in *M. truncatula*, but also in *Arabidopsis thaliana*, barley, cotton, grape, and sorghum. The methods of the invention allow creation of plants having novel phenotypes. Increased expression of condensed tannins in plants may be used to increase the nutritional value of food plants for both human and animal consumption. Increased condensed tannin content also reduces the potential for bloat in animals fed certain forage plants low in condensed tannin content. The invention may also be used to modify plant pigmentation.

IT 701396-21-6

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses) (amino acid sequence; genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase)

RN 701396-21-6 HCAPLUS

CN Isomerase, chalcone (*Arabidopsis thaliana* clone WO2004002215-SEQID-24) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

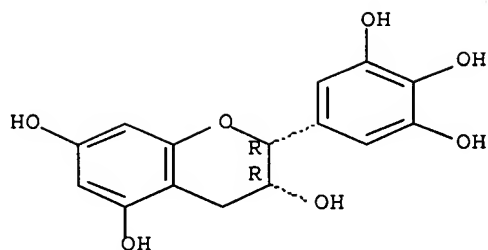
IT 970-74-1P, Epi-Gallocatechin

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation) (genetic manipulation of condensed tannins in transgenic plants expressing anthocyanidin reductase and chalcone isomerase)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R) - (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:392376 HCAPLUS Full-text  
 DOCUMENT NUMBER: 140:401353  
 TITLE: Methods for increased expression of condensed tannins  
 in transgenic plants for use in forage crops  
 INVENTOR(S): Dixon, Richard A.; Paiva, Nancy L.; Xie, Deyu; Sharma,  
 Shashi  
 PATENT ASSIGNEE(S): The Samuel Roberts Nobel Foundation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 106 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004093632	A1	20040513	US 2003-610351	20030630
PRIORITY APPLN. INFO.:			US 2002-392562P	P 20020628

AB The invention provides methods for increased expression of condensed tannins in transgenic plants for use in forage crops. The production of condensed tannins in plants is regulated by several gene products, including anthocyanidin reductase (BAN), TTG1, TT2, TT8, TT12, and chalcone isomerase. The gene BAN was cloned and its product was determined to have anthocyanidin reductase enzyme activity, reducing cyanidin to catechin and epicatechin, pelargonidin to epi-afzelechin, and delphinidin to gallo-catechin and epigallocatechin. This invention focuses on gene transfer and expression of these tannin modulator genes, in transgenic forage crops. The increased tannin production is associated with plant phenotypic changes including a reduction in anthocyanin pigmentation, as well as increased nutritional value and reduced potential for animal bloat upon consumption of these modified crops.

IT 688367-09-1, Protein (Arabidopsis thaliana gene TT2)  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (amino acid sequence; methods for increased expression of condensed  
 tannins in transgenic plants for use in forage crops)

RN 688367-09-1 HCAPLUS

CN Protein (Arabidopsis thaliana gene TT2) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

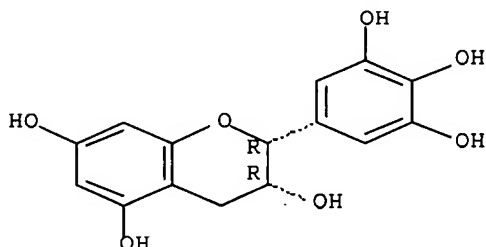
IT 970-74-1P, Epigallocatechin  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
 BIOL (Biological study); PREP (Preparation)  
 (production of, following reduction of delphinidin, by anthocyanidin  
 reductase;

methods for increased expression of condensed tannins in transgenic plants for use in forage crops)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:142983 HCAPLUS Full-text

DOCUMENT NUMBER: 140:187411

TITLE: Compositions containing peptide copper complexes and phytochemical compounds, and methods related thereto  
Patt, Leonard M.

INVENTOR(S):  
PATENT ASSIGNEE(S): Procyte Corporation, USA

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

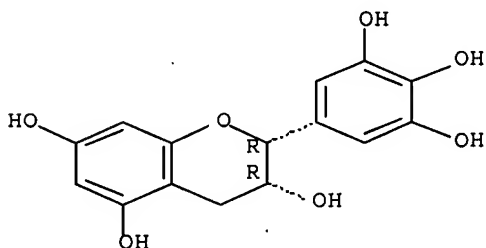
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004014413	A1	20040219	WO 2003-US23293	20030724
WO 2004014413	A8	20040521		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2494156	A1	20040219	CA 2003-2494156	20030724
AU 2003256797	A1	20040225	AU 2003-256797	20030724
US 2004180102	A1	20040916	US 2003-627193	20030724
EP 1545579	A1	20050629	EP 2003-784817	20030724
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-400318P	P 20020731
			WO 2003-US23293	W 20030724

AB Compns. having antioxidant, anti-inflammatory and/or cosmetic utility for a mammal, combining at least one peptide copper complex and at least one

phytochem. compound are described. More particularly, the phytochem. compound is a polyphenol or a carotenoid, the polyphenol being a flavanoid, a flavonoid, a flavonoid derivative, a flavolignan, a polyphenolic rhizome, or their mixts. Compns. for topical application include additives such as emollients, sunscreen agents, skin protectants, skin conditioning agents, and humectants. Methods, employing such compns., are described for enhancing or restoring the resistance of a mammal to oxidative or inflammatory damage, for accelerating wound healing, for cosmetically healing mammalian skin, and for stimulating hair growth, or preventing or treating hair loss. For example, a moisturizing lotion contained water 74%, glycerin 1.0%, xanthan gum 0.50%, diisopropyl adipate 4.0%, isocetyl stearate 6.0%, octyl palmitate 10.0%, glyceryl stearate 1.0%, cetyl alc. 1.0%, stearyl alc. 0.8%, behenyl alc. 0.5%, palmitic acid 0.3%, stearic acid 0.25%, glycyl-L-histidyl-L-lysine -copper complex 0.2%, catechin 0.01%, gallic acid 0.01%, epicatechin 0.01%, propylene glycol 0.55%, diazolidinylurea 0.03%, and iodopropynyl Bu carbonate 0.02%. The formulation is beneficial as the phytochem. compound provides anti-inflammatory action to the skin in addition to the anti-inflammatory and tissue rebuilding activity provided by the presence of the copper peptide compound

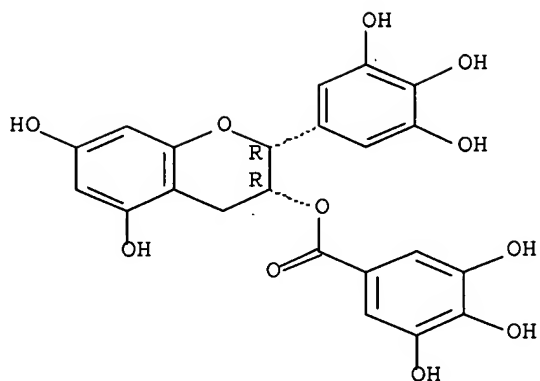
- IT 970-74-1, Epigallocatechin 989-51-5,  
Epigallocatechin gallate 49557-75-7D, Glycyl  
-L-histidyl-L-lysine, derivs., copper(II) complexes  
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);  
USES (Uses)  
(compns. containing peptide-copper complexes and phytochem. compds. having  
antioxidant and anti-inflammatory activities)
- RN 970-74-1 HCAPLUS
- CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,  
(2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



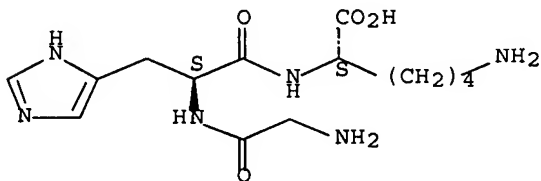
- RN 989-51-5 HCAPLUS
- CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 49557-75-7 HCAPLUS  
 CN L-Lysine, glycyl-L-histidyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:969412 HCAPLUS Full-text  
 DOCUMENT NUMBER: 140:730  
 TITLE: Human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer  
 INVENTOR(S): Wittig, Rainer; Poustka, Annemarie; Mollenhauer, Jan; Schadendorf, Dirk  
 PATENT ASSIGNEE(S): Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany  
 SOURCE: Eur. Pat. Appl., 23 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1369482	A1	20031210	EP 2002-12705	20020607
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2004038020	A1	20040506	WO 2003-EP6061	20030610
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003245927 A1 20040513 AU 2003-245927 20030610

PRIORITY APPLN. INFO.:

EP 2002-12705 A 20020607

WO 2003-EP6061 W 20030610

AB The present invention relates to the identification and use of target genes for the detection and treatment of drug-resistant tumor cells. The nucleic acids of the present invention exhibit a deregulated phenotype when the tumor cells are subjected to cytostatic drugs, i.e., they are expressed in a higher or lower amount as compared to parental drug-sensitive cancer cells. Thus, they can be used as a diagnostic and pharmaceutical tool to render drug-resistant cells drug-sensitive. In addition, the present invention includes the polypeptides encoded by the resp. nucleic acids, expression vectors harboring the nucleic acids, host cells for expression and methods for the diagnosis and treatment of drug-resistant tumor cells.

IT 179671-71-7 391970-73-3, Procollagen type V (human gene COL5A2 subunit  $\alpha$ 2) 459655-32-4, Protein (human clone hh04777s1 gene KIAA0938)

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer)

RN 179671-71-7 HCAPLUS

CN Laminin (human clone  $\lambda$ 7-1 gene LAMA4  $\alpha$ 4 chain precursor) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 391970-73-3 HCAPLUS

CN Procollagen type V (human gene COL5A2 subunit  $\alpha$ 2) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 459655-32-4 HCAPLUS

CN Protein (human clone hh04777s1 gene KIAA0938) (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 989-51-5, Epigallocatechin gallate

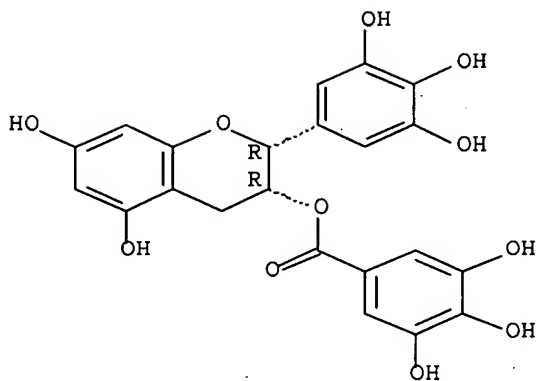
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(human genes deregulated in drug-resistant tumor cells in response to cytotoxic drugs and methods for diagnosis and treatment of cancer)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:633887 HCAPLUS Full-text

DOCUMENT NUMBER: 139:176980

TITLE: MICAL proteins of Drosophila and human interacting with CAS-L protein and playing a role in axonal repulsion and their uses

INVENTOR(S): Kolodkin, Alex L.; Terman, Jon Richard; Mao, Tianyi; Pasterkamp, Ronald Jeroen; Yu, Hung-hsiang

PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, USA

SOURCE: PCT Int. Appl., 367 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003066821	A2	20030814	WO 2003-US3551	20030204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003217334	A1	20030902	AU 2003-217334	20030204
US 2003232419	A1	20031218	US 2003-359012	20030204
EP 1572907	A2	20050914	EP 2003-713377	20030204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-354178P	P 20020204
			US 2002-384302P	P 20020530
			US 2002-388325P	P 20020613
			WO 2003-US3551	W 20030204

AB Proteins that interact with CAS-L Cas-L (Crk-associated substrate-related protein, lymphocyte) and that play a role in plexin-mediated axonal repulsion are identified in *Drosophila* and human and genes encoding them are cloned. The proteins (MICAL: mol. interacting with CAS-L) and genes may be used in identifying agents that affect axon growth and placement. Furthermore, provided herein are methods for affecting axon growth and placement. The proteins were first identified in a two-hybrid screen for proteins interacting with *Drosophila* plexin A. The mRNA is widely distributed in the *Drosophila* embryo. P-element inactivation of the gene gave rise to flies with deficiencies in axonal guidance comparable to those seen in mutations in genes for semaphorins and plexins. The protein has a functional flavin monooxygenase domain that is essential for interactions with semaphorins. Gallic acid derivs. blocked semaphorin 3A axonal repulsion.

IT 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin gallate 83104-87-4 89064-31-3, Theasinensin A

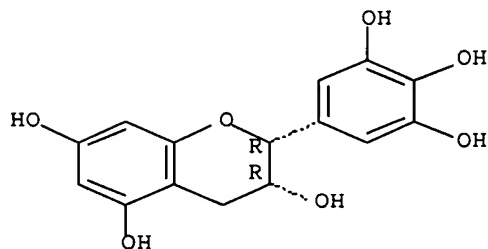
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(as inhibitor of flavin monooxygenase and axonal repulsion; MICAL proteins of *Drosophila* and human interacting with CAS-L protein and playing role in axonal repulsion and their uses)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

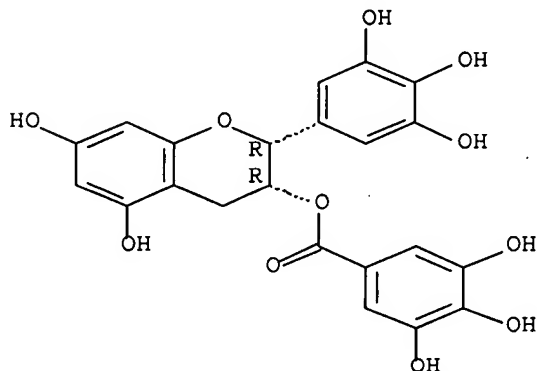
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

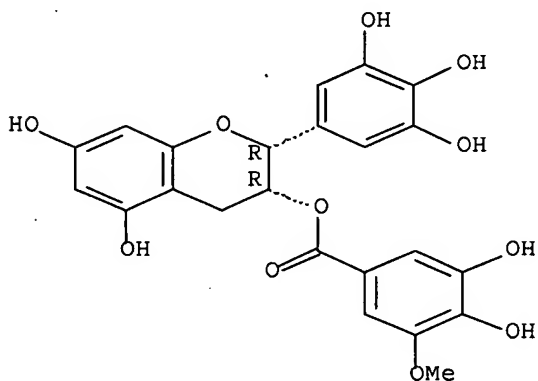




RN 83104-87-4 HCAPLUS

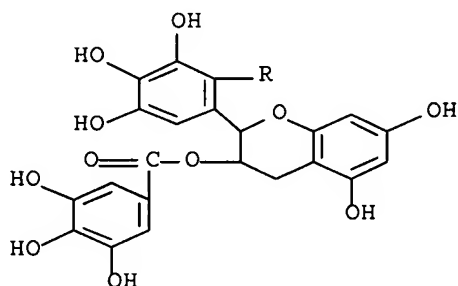
CN Benzoic acid, 3,4-dihydroxy-5-methoxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

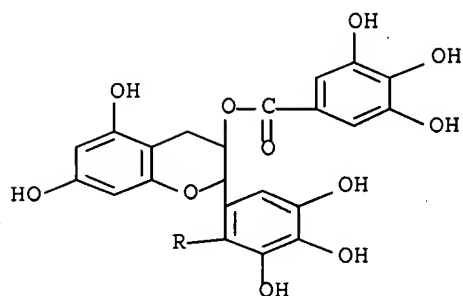


RN 89064-31-3 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, [(1R)-4,4',5,5',6,6'-hexahydroxy[1,1'-biphenyl]-2,2'-diyl]bis[(2R,3R)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-2,3-diyl] ester (9CI) (CA INDEX NAME)



PAGE 1-A



IT 579542-95-3 579542-98-6

RL: PRP (Properties)

(unclaimed protein sequence; mICAL proteins of Drosophila and human interacting with CAS-L protein and playing a role in axonal repulsion and their uses)

RN 579542-95-3 HCAPLUS

CN 26: PN: WO03066821 SEQID: 26 unclaimed protein (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

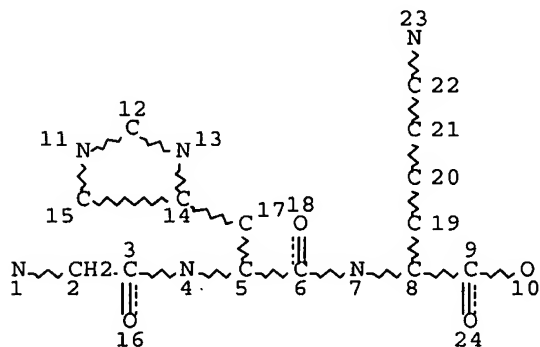
RN 579542-98-6 HCAPLUS

CN 29: PN: WO03066821 SEQID: 29 unclaimed protein (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

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L3 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5 192 SEA FILE=REGISTRY SSS FUL L3

L6 262726 SEA FILE=REGISTRY ABB=ON PLU=ON COPPER?/CN

L7 118245 SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP

L8 50 SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?  
 L9 14733 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY  
 S?  
 L10 1410113 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?  
 L11 5101 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?  
 L12 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11  
 L13 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11  
 L18 232 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L10  
 L21 5 SEA FILE=REGISTRY ABB=ON PLU=ON SALINE/BI  
 L22 SEL PLU=ON L21 1- CHEM : 13 TERMS  
 L23 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L22  
 L24 114053 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR SALINE  
 L25 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L24  
 L26 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L12 OR L13)

=> d ibib abs hitstr l26 1-5

L26 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:39067 HCAPLUS Full-text

DOCUMENT NUMBER: 147:63807

TITLE: Protective effect of epigallocatechin

-3-gallate on kidney injury of mice with endotoxemia

AUTHOR(S): Xu, Wenping; Cao, Yongan; Ji, Yuee; Shi, Wenyan

CORPORATE SOURCE: Department of Preclinical Medicine, Jiangsu Staff  
Medical University, Nanjing, Jiangsu Province, 210029,  
Peop. Rep. China

SOURCE: Nanjing Yike Daxue Xuebao (2005), 25(10), 727-728

CODEN: NYDXFS; ISSN: 1007-4368

PUBLISHER: Nanjing Yike Daxue Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Forty Kunming mice were randomly divided into 4 groups: control group (N group), lipopolysaccharide group (LPS group), EGCG 1 group, and EGCG 2 group, 10 mice for each group. Mice in LPS, EGCG 1 and EGCG 2 group were injected of 5 mg/kg LPS, then mice in EGCG 1 and EGCG 2 group were given 10 mg/kg EGCG and 30 mg/kg EGCG resp. 20 min later. Mice in N group was injected of 5 mg/kg saline. The content of malondialdehyde (MDA) and activity of superoxide dismutase (SOD) and Ca<sup>2+</sup>-Mg<sup>2+</sup> ATPase in renal tissue were measured. The results showed that the content of MDA significantly increased and activity of SOD significantly decreased in LPS group compared with those in N group (P<0.01, 0.01); the activity of Ca<sup>2+</sup>-Mg<sup>2+</sup> ATPase decreased. The content of MDA decreased in EGCG 1 group and significantly decreased in EGCG 2 group (P<0.01) compared with LPS group; activity of SOD increased in EGCG 1 group and significantly increased in EGCG 2 group (P<0.01). The activity of Ca<sup>2+</sup>-Mg<sup>2+</sup> ATPase increased EGCG 1 group and EGCG 2 group, but it was not significantly. The results indicated that EGCG has protective effect on kidney injury of mice with endotoxemia.

IT 9054-89-1, Superoxide dismutase

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(protective effect of epigallocatechin-3-gallate on kidney  
injury of mice with endotoxemia)

RN 9054-89-1 HCAPLUS

CN Dismutase, superoxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 989-51-5, Epigallocatechin-3-gallate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

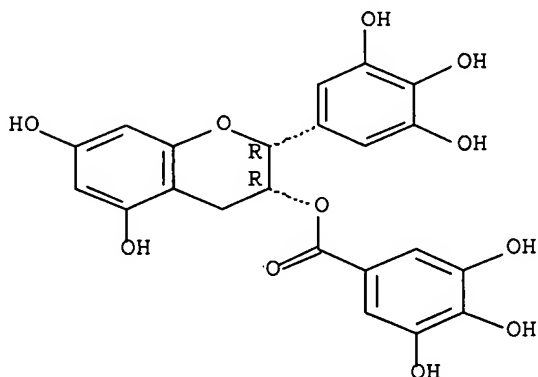
(Biological study); USES (Uses)

(protective effect of epigallocatechin-3-gallate on kidney injury of mice with endotoxemia)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L26 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:973023 HCAPLUS Full-text

DOCUMENT NUMBER: 145:501682

TITLE: Effects of oral green tea polyphenols on preservation of isolated heart

AUTHOR(S): Gao, Wen-bo; Zhu, You-hua; Wang, Ya-wei

CORPORATE SOURCE: Institute of Organ Transplantation, Shanghai Changzheng Hospital, Second Military Medical University, Shanghai, 200003, Peop. Rep. China

SOURCE: Shiyong Yixue Zazhi (2006), 22(12), 1362-1363

CODEN: SYZAFM; ISSN: 1006-5725

PUBLISHER: Shiyong Yixue Zazhi Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

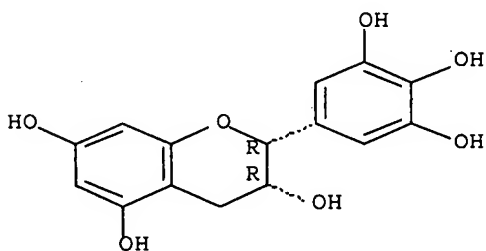
AB This paper investigated the effects of oral green tea polyphenols (GTP) on the preservation of isolated rat heart. Sixteen SD rats were randomly divided into 2 groups. Eight rats in the exptl. group were orally administered with GTP for 20 days, while eight rats in the control group received saline solution. The rat hearts were removed and performed with Langendorff perfusion, and the cardiac function was measured. The isolated hearts were stored in UW solns. at 4°C for 8 h. The cardiac function was measured again after reperfusion. The activity of lactate dehydrogenase (LDH) and creatine kinase (CK) from the coronary effluent and the activity of superoxide dismutase (SOD) and the malondialdehyde (MDA) content in myocardial tissue were detected. The myocardial ultrastructure was examined. Results showed that the parameters of the cardiac function except heart rate in the exptl. group were significantly better than those in the control group ( $P < 0.05$ ). Myocardial water content, LDH and CK activity, and MDA content in the exptl. group were lower than those in the control group ( $P < 0.05$ ). Coronary flow and SOD activity in the exptl. group were higher than those in the control group ( $P < 0.05$ ). The exptl. group had improved myocardial ultrastructure. In conclusion, oral GTP had protective effects on the isolated heart.

IT 9054-89-1, Superoxide dismutase  
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (effects of oral green tea polyphenols on preservation of isolated heart)  
 RN 9054-89-1 HCAPLUS  
 CN Dismutase, superoxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

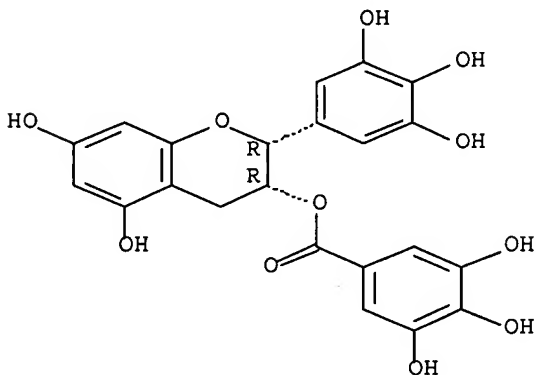
IT 970-74-1, Epigallocatechin 989-51-5,  
 Epigallocatechin gallate  
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (effects of oral green tea polyphenols on preservation of isolated heart)  
 RN 970-74-1 HCAPLUS  
 CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



DOCUMENT NUMBER: 144:184652  
 TITLE: Novel pathways in the etiology of cancer, and treatment methods  
 INVENTOR(S): Benz, Christopher C.  
 PATENT ASSIGNEE(S): Buck Institute for Age Research, USA  
 SOURCE: U.S. Pat. Appl. Publ., 49 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2006024691	A1	20060202	US 2005-90546	20050324
PRIORITY APPLN. INFO.:			US 2004-556774P	P 20040325
			US 2004-580534P	P 20040616
			US 2004-629691P	P 20041119

AB The invention pertains to the identification of two novel epithelial signaling pathways in ER-pos. breast cancers and the discovery that the cellular biol. and (likely also the clin. outcome) of ER-pos. breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF- $\kappa$ B activation and/or DNA binding is implicated in the etiol. of ER-pos. breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by phosphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDa) ER as well as the phosphorylating activation of a truncated and nuclear-localized ER variant (.apprx.52 kDa). Also disclosed are methods for identifying patients likely to respond to hormonal therapy and for selecting a therapeutic regimen for the treatment of cancer.

IT 9054-89-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (manganese-dependent; pathways in etiol. of cancer, and treatment methods)

RN 9054-89-1 HCAPLUS

CN Dismutase, superoxide (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

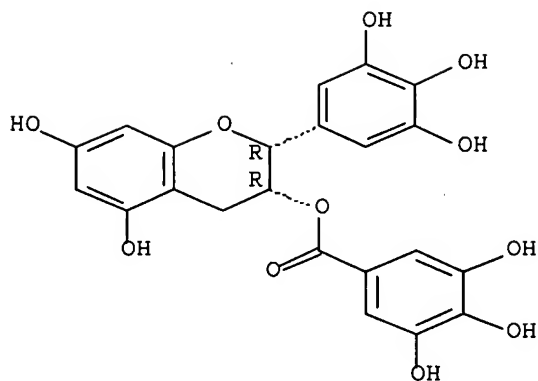
IT 989-51-5, Epigallocatechin-3-gallate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (pathways in etiol. of cancer, and treatment methods)

RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L26 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:788478 HCAPLUS Full-text

DOCUMENT NUMBER: 140:258840

TITLE: Investigating the stability of EGCg in aqueous media

AUTHOR(S): Zhou, Q.; Chiang, H.; Portocarrero, C.; Zhu, Y.; Hill, S.; Heppert, K.; Jayaratna, H.; Davies, M.; Janle, E.; Kissinger, P.

CORPORATE SOURCE: Bioanalytical Systems, Inc., West Lafayette, IN, 47906, USA

SOURCE: Current Separations (2003), 20(3), 83-86

CODEN: CUSEEW; ISSN: 0891-0006

PUBLISHER: Bioanalytical Systems, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB (-)-Epigallocatechin gallate (EGCg) is the most prevalent catechin in green tea extract, to which most of the health benefit of green tea has been attributed. Since EGCg is an antioxidant, its stability in various biol. fluids must be evaluated prior to the study of its in vivo pharmacokinetics and pharmacodynamics. For this purpose, a multi-channel LC/EC (liquid chromatog. with electrochem. detection) method was developed to determine EGCg quantity at a concentration very likely to be found in vivo (<500 ng/mL). A microbore column was used to minimize sample consumption. The detection limit for EGCg was 0.8 ng/mL at a potential of +600 mV vs. Ag/AgCl. The calibration curve was linear over the range of 1-500 ng/mL. Using this method, the stability of EGCg (100 ng/mL) in 10 mM HCl, saline and Ringers' solution, with or without preservatives, was monitored. It was found that EGCg was very stable in all these solns. at low temperature only when they were free of certain metal ion contaminants. Therefore, it is suggested to stabilize EGCg solns. by use of a metal scavenger (EDTA), an antioxidant (e.g. ascorbic acid), keeping the pH below or close to neutral and keeping the temperature cold during sampling and storage of EGCg.

IT 7440-50-8, Copper, biological studies

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

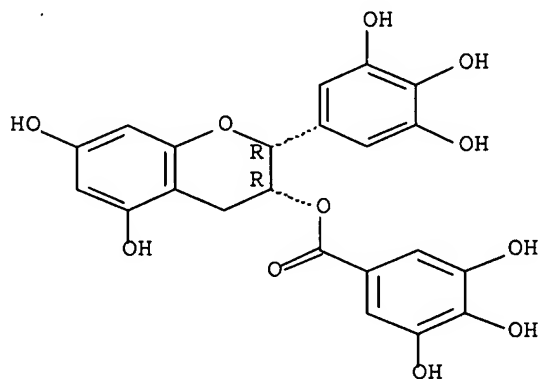
(stability of epigallocatechin gallate in aqueous media)

RN 7440-50-8 HCAPLUS

CN Copper (CA INDEX NAME)

IT 989-51-5, (-)-**Epigallocatechin gallate**  
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (stability of **epigallocatechin gallate** in aqueous media)  
 RN 989-51-5 HCAPLUS  
 CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:166105 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:256454  
 TITLE: epicatechin-copper(II) complexes: Damage of small intestinal epithelium  
 AUTHOR(S): Stavrescu, Ruxandra B.; Kimura, Takahide; Hayakawa, Fumiko; Ando, Takashi  
 CORPORATE SOURCE: Department of Chemistry, Shiga University of Medical Science, Seta, Otsu, Shiga, 520-2192, Japan  
 SOURCE: Central European Journal of Chemistry (2003), 1(1), 39-56  
 CODEN: CEJCAZ; ISSN: 1644-3624  
 URL: <http://pippo.ingentaselect.com/vl=17857725/cl=110/nw=1/rpsv/catchword/cesj/16443624/previews/4.pdf>  
 PUBLISHER: Central European Science Journals  
 DOCUMENT TYPE: Journal; (online computer file)  
 LANGUAGE: English

AB Four epicatechins [(**-**)-epicatechin (EC), (**-**)-epicatechin gallate (ECg), (**-**)-epigallocatechin (EGC), (**-**)-epigallocatechin gallate (EGCg)] and their corresponding **copper** complexes were compared with regard to their effect on the viability of Caco-2 colon cancer cells in vitro, measured by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay. The viability of Caco-2 cells exposed to EC (1 mM), ECg (1 mM) or EGC (1 mM) resp., for 30 min, was comparable to that of the **saline** control group, while EGCg (1 mM) apparently enhanced cellular activity. In contrast, the cells treated with epicatechin-**copper** complexes were killed. Bivalent **copper** (1 mM), in similar conditions, did not affect the cells. No cell leakage or other



histol. differences were observed, implying a rapid cell death. The suggested mechanism of killing is by OH radical attack, produced in the presence of epicatechin-copper complexes, but not in the presence of either of the epicatechins or copper alone. The reaction sites are discussed.

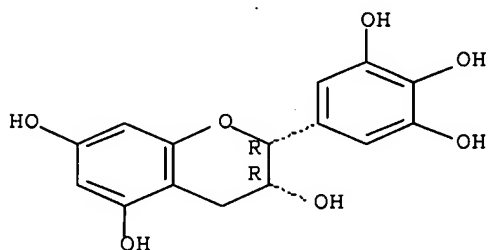
IT 970-74-1, (-)-Epigallocatechin 989-51-5, (-)-Epigallocatechin gallate

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(complexes with copper; damage of small intestinal epithelium by epicatechin-copper(II) complexes)

RN 970-74-1 HCAPLUS

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R,3R)- (CA INDEX NAME)

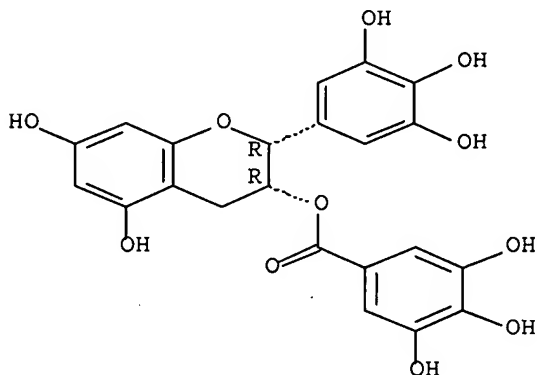
Absolute stereochemistry. Rotation (-).



RN 989-51-5 HCAPLUS

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 7440-50-8, Copper, biological studies

RL: PAC (Pharmacological activity); BIOL (Biological study)  
(complexes with epicatechins; damage of small intestinal epithelium by epicatechin-copper(II) complexes)

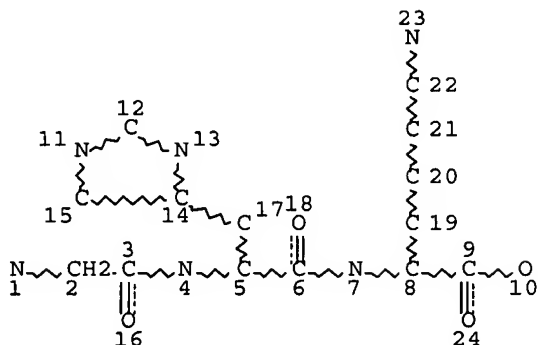
RN 7440-50-8 HCAPLUS

CN Copper (CA INDEX NAME)

Cu

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d stat que l31  
L3 STR



NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L5	192	SEA FILE=REGISTRY SSS FUL L3
L6	262726	SEA FILE=REGISTRY ABB=ON PLU=ON COPPER?/CN
L7	118245	SEA FILE=REGISTRY ABB=ON PLU=ON GHK/SQSP
L8	50	SEA FILE=REGISTRY ABB=ON PLU=ON EPIGALLOCATECH?
L9	14733	SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L7 OR GLY?(2W)HIS?(2W)LY S?
L10	1410113	SEA FILE=HCAPLUS ABB=ON PLU=ON L6 OR CU OR COPPER OR CU2?
L11	5101	SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR ?EPIGALLOCATECH?
L12	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L10 AND L11
L13	7	SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L11
L18	232	SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L10
L21	5	SEA FILE=REGISTRY ABB=ON PLU=ON SALINE/BI
L22		SEL PLU=ON L21 1- CHEM : 13 TERMS
L23	114053	SEA FILE=HCAPLUS ABB=ON PLU=ON L22
L24	114053	SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR SALINE
L25	6	SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L24
L26	5	SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L12 OR L13)
L30	58	SEA FILE=HCAPLUS ABB=ON PLU=ON ("PATT L"/AU OR "PATT L M"/AU OR "PATT LEON A"/AU OR "PATT LEONARD M"/AU)
L31	43	SEA FILE=HCAPLUS ABB=ON PLU=ON L30 NOT (L9 OR L13 OR L26)

=> d ibib abs hitstr l31 1-43

L31 ANSWER 1 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:195795 HCAPLUS Full-text

DOCUMENT NUMBER: 144:260120  
 TITLE: Polyethylene glycol-peptide copper complexes and compositions for cosmetic and therapeutic use  
 INVENTOR(S): Patt, Leonard M.  
 PATENT ASSIGNEE(S): Procyte Corporation, USA  
 SOURCE: PCT Int. Appl., 31 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006023465	A1	20060302	WO 2005-US29047	20050816
WO 2006023465	A8	20060601		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

US 2006052287 A1 20060309 US 2005-204772 20050816

PRIORITY APPLN. INFO.: US 2004-602715P P 20040818

OTHER SOURCE(S): MARPAT 144:260120

AB This invention relates to compns. comprising polyethylene glycol mols. coupled to peptide copper complexes, and, addnl., to such compns. formulated for use as pharmaceutical and cosmetic products, as well as to medical devices that comprise such compns.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:121345 HCAPLUS Full-text

DOCUMENT NUMBER: 126:126927

TITLE: Stable copper(I) complexes as active therapeutic substances

INVENTOR(S): Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

PATENT ASSIGNEE(S): Procyte Corporation, USA; Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9639144	A1	19961212	WO 1996-US10122	19960606
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,			

ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS,  
 LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
 SE, SG

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

AU 9662748 A 19961224 AU 1996-62748 19960606  
 PRIORITY APPLN. INFO.: US 1995-468645 A 19950606  
 WO 1996-US10122 W 19960606

AB Stable Copper(I) complexes and methods relating thereto are disclosed. The stable Copper (I) complexes comprise a Copper(I) ion complexed by a multi-dentate ligand which favors the +1 oxidation state for copper. The complexes may be used as wound healing agents, anti-oxidative agents, anti-inflammatory agents, lipid modulating agents, signal transduction modulating agents, hair growth agents, and antiviral agents. Uses of this invention also include inhibition of viral infection, as well as inhibiting transmission of sexually transmitted diseases. The stable Copper(I) complexes of the invention include neocuproine Copper(I) and bathocuproine disulfonic acid Copper(I). Preparation of copper (I) neocuproine is described, as are inhibitory effects of the complexes of the invention against e.g a variety of viruses.

L31 ANSWER 3 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:150305 HCAPLUS Full-text

DOCUMENT NUMBER: 124:185146

TITLE: Stimulation of hair growth by peptide-copper complexes

INVENTOR(S): Pallenberg, Alexander J.; Patt, Leonard M.;  
 Trachy, Ronald E.

PATENT ASSIGNEE(S): Procyte Corp., USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9535085	A1	19951228	WO 1995-US7626	19950616
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5538945	A	19960723	US 1994-261475	19940617
CA 2192944	A1	19951228	CA 1995-2192944	19950616
CA 2192944	C	20001017		
AU 9528615	A	19960115	AU 1995-28615	19950616
EP 765152	A1	19970402	EP 1995-923906	19950616
EP 765152	B1	20011107		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9508044	A	19971118	BR 1995-8044	19950616
JP 10504286	T	19980428	JP 1995-502485	19950616
AT 208181	T	20011115	AT 1995-923906	19950616
ES 2162637	T3	20020101	ES 1995-923906	19950616
PT 765152	T	20020328	PT 1995-923906	19950616
US 6017888	A	20000125	US 1997-996307	19971223
JP 2006328076	A	20061207	JP 2006-196269	20060718

PRIORITY APPLN. INFO.:                   US 1994-261475           A 19940617  
  JP 1996-502485           A3 19950616  
  WO 1995-US7626           W 19950616  
  US 1996-683889           B1 19960719

OTHER SOURCE(S):                   MARPAT 124:185146

AB    Peptide-copper complexes are disclosed which stimulate the growth of hair on warm-blooded animals. The peptide-copper complexes are dipeptides or tripeptides chelated to copper at a molar ratio ranging from about 1:1 to 3:1, with the second position of the peptide from the amino terminus being histidine, arginine or derivative thereof. A solution of CuCl<sub>2</sub> was added to a solution of L-alanyl-L-histidyl-L-lysine.2HCl (preparation given) (I), then the pH was adjusted to 6.89 to obtain an aqueous solution containing I:Cu (II) at a molar ratio of peptide to copper of 1.1:1. Administration of a topical formulation of 0.1% II on mice skin increased the hair growth in treated area by 90.14% after 34 days.

L31 ANSWER 4 OF 43   HCAPLUS   COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:           1996:47479   HCAPLUS   Full-text

DOCUMENT NUMBER:           124:155626

TITLE:                    Quantitative assessment of peptide-copper complex-induced hair follicle stimulation using the fuzzy rat

AUTHOR(S):                Trachy, Ronald E.; Uno, Hideo; Packard, Shelley; Patt, Leonard M.

CORPORATE SOURCE:         Department Toxicology, ProCyte Corporation, Kirkland, WA, USA

SOURCE:                  Dermatologic Research Techniques (1996), 227-39.  
Editor(s): Maibach, Howard I.   CRC: Boca Raton, Fla.  
CODEN: 62DZAA

DOCUMENT TYPE:            Conference

LANGUAGE:                 English

AB    The fuzzy rat model was used to evaluate the effects of a peptide-copper compound, PC 1031, on hair growth. Topical treatment with PC 1031 resulted in an increase in the percentage of hair follicles in the anagen or growth phase. PC 1031 also caused an increase in hair follicle size, both in terms of the percentage of telogen and anagen follicles of terminal length in follicle cross-sectional area.

L31 ANSWER 5 OF 43   HCAPLUS   COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:           1996:47478   HCAPLUS   Full-text

DOCUMENT NUMBER:           124:155625

TITLE:                    Phototrichogram analysis of hair follicle stimulation: A pilot clinical study with a peptide-copper complex

AUTHOR(S):                Trachy, Ronald E.; Patt, Leonard M.; Duncan, Gordon M.; Kalis, Bernard

CORPORATE SOURCE:         Department Toxicology, ProCyte Corporation, Kirkland, WA, USA

SOURCE:                  Dermatologic Research Techniques (1996), 217-26.  
Editor(s): Maibach, Howard I.   CRC: Boca Raton, Fla.  
CODEN: 62DZAA

DOCUMENT TYPE:            Conference

LANGUAGE:                 English

AB    The hair densities in the present study were more consistent with the unit area trichogram data (approx. 150-300 hairs cm<sup>2</sup>) than with studies using direct hair counting methodologies. The phototrichogram results with 10% PC 1031 demonstrated an overall trend toward hair regrowth, while the vehicle

group experienced a decrease in hair d. The relative efficacy of a peptide-copper complex (PC 1031) and minoxidil is difficult to assess at this time. However, when evaluated in sep. studies utilizing sensitive anal. techniques rather than direct counting, both drugs appear to at least arrest hair loss, and perhaps stimulate hair growth.

L31 ANSWER 6 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:808956 HCAPLUS Full-text

DOCUMENT NUMBER: 123:306037

TITLE: Inhibition of the human immunodeficiency virus-1 protease and human immunodeficiency virus-1 replication by bathocuproine disulfonic acid Cul<sup>+</sup>

AUTHOR(S): Davis, David A.; Branca, Andrew A.; Pallenberg, Alexander J.; Marschner, Thomas M.; Patt, Leonard M.; Chatlynne, Louise G.; Humphrey, Rachel W.; Yarchoan, Robert; Levine, Rodney L.

CORPORATE SOURCE: Lab. Biochem., Natl. Heart, Lung and Blood Inst., Bethesda, MD, 20892-0320, USA

SOURCE: Archives of Biochemistry and Biophysics (1995), 322(1), 127-34

CODEN: ABBIA4; ISSN: 0003-9861

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The protease encoded by the human immunodeficiency virus-1 (HIV-1) is essential for processing viral polyproteins which contain the enzymes and structural proteins required for the infectious virus. It was previously found that cupric chloride, in the presence of dithiothreitol or ascorbic acid, could inhibit the HIV-1 protease. It was suggested that a Cul<sup>+</sup> chelate was the moiety responsible for inhibition of the protease. This hypothesis has now been investigated directly by utilizing the stable Cul<sup>+</sup> chelate, bathocuproine disulfonic acid Cul<sup>+</sup> (BCDS-Cul<sup>+</sup>). BCDS-Cul<sup>+</sup> inhibited the HIV-1 wild type protease as well as a mutant HIV-1 protease lacking cysteines. An analog, neocuproine-Cul<sup>+</sup> was only partially inhibitory. BCDS-Cul<sup>+</sup> was a competitive inhibitor of the mutant HIV-1 protease with an apparent K<sub>i</sub> of 1 μM. Replication of HIV-1 in human lymphocytes and the cytotoxic effect of HIV-1 in CEM cells was inhibited by micromolar BCDS-Cul<sup>+</sup>. Neocuproine-Cul<sup>+</sup> was too cytotoxic to be evaluated in this assay. Inhibition of the protease and of HIV replication by BCDS-Cul<sup>+</sup> was dependent on the presence of Cul<sup>+</sup> as BCDS alone was ineffective. EDTA blocked the inhibition of the protease by Cul<sup>+</sup> but was unable to block inhibition of the protease by BCDS-Cul<sup>+</sup>, indicating that the Cul<sup>+</sup> complex was the inhibitory agent. The apparent IC<sub>50</sub> for BCDS-Cul<sup>+</sup> on the inhibition of replication by primary isolates of HIV-1 was 5 μM. However, BCDS-Cul<sup>+</sup> did not affect polyprotein processing in an H9 cell line chronically infected with HIV-1, indicating that BCDS-Cul<sup>+</sup> acts by yet another mechanism to block HIV infection. Other possible targets for BCDS-Cul<sup>+</sup> include inhibition of viral adsorption and/or inhibition of the HIV-1 integrase.

L31 ANSWER 7 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:347104 HCAPLUS Full-text

DOCUMENT NUMBER: 122:256396

TITLE: Stable copper(I) complexes with multidentate ligands as therapeutic agents

INVENTOR(S): Pallenberg, Alexander J.; Branca, Andrew; Marschner, Thomas M.; Patt, Leonard M.

PATENT ASSIGNEE(S): Procyte Corp., USA  
 SOURCE: PCT Int. Appl., 88 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9427594	A2	19941208	WO 1994-US6247	19940602
WO 9427594	A3	19950427		
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2163640	A1	19941208	CA 1994-2163640	19940602
AU 9470517	A	19941220	AU 1994-70517	19940602
ZA 9403857	A	19950201	ZA 1994-3857	19940602
EP 701439	A1	19960320	EP 1994-919342	19940602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
ZA 9409336	A	19950808	ZA 1994-9336	19941124
PRIORITY APPLN. INFO.:			US 1993-71440	A 19930602
			WO 1994-US6247	W 19940602

AB Stable copper(I) complexes useful as therapeutic agents comprise a copper(I) ion complexed by a multi-dentate ligand which favors the +1 oxidation state for copper. The stable copper(I) complexes of the invention are useful as wound healing agents, anti-oxidative agents, anti-inflammatory agents, lipid modulating agents, signal transduction modulating agents, hair growth agents, and anti-viral agents. Exemplary stable copper(I) complexes include neocuproine copper(I) and bathocuproine disulfonic acid copper(I). The synthesis of neocuproine copper(I) complex synthesis is given.

L31 ANSWER 8 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:11696 HCAPLUS Full-text

DOCUMENT NUMBER: 118:11696

TITLE: Control of continuous vibration fluidized-bed drying by measurement of relative granule humidity

AUTHOR(S): Fuchs, G.; Patt, L.; Haberstroh, A.

CORPORATE SOURCE: Sandoz A.-G., Nuernberg, W-8500/1, Germany

SOURCE: Pharmazeutische Industrie (1992), 54(4), 366-9

CODEN: PHINAN; ISSN: 0031-711X

DOCUMENT TYPE: Journal

LANGUAGE: German

AB A device for the online measurement of relative granule moisture contents for process control during fluidized-bed drying in the manufacture of solid pharmaceuticals is described. Consisting of a plate condensor situated behind a teflon filter, the sensor measures moisture contents by changes in the former's dielec. constant as a result of humidity changes in the air in contact with the granules. The performance of the system in optimizing the drying process in relation to residual moisture content reproducibility is illustrated with data from model granulations.

L31 ANSWER 9 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:137820 HCAPLUS Full-text

DOCUMENT NUMBER: 108:137820  
TITLE: Film coating under production conditions with a solvent recovery system and in a closed gas circuit  
AUTHOR(S): Koeblitz, T.; Patt, L.; Dertinger, G.  
CORPORATE SOURCE: Maschinenfabr., A. Heinen G.m.b.H., Varel, D-2930, Fed. Rep. Ger.  
SOURCE: Pharmazeutische Industrie (1988), 50(1), 81-91  
CODEN: PHINAN; ISSN: 0031-711X  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB The industrial manufacture of cellulose-coated tablets by using organic solvents is described. In addition to discussing the central process, problems of dust separation in a closed gas circuit, air throughout in the coater, organic solvent spraying rate, and solvent recovery are described, as well as energy efficiency data and safety considerations. Various solvent mixts. (of Me<sub>2</sub>CO, CH<sub>2</sub>Cl<sub>2</sub>, MeOH, and EtOH) were successfully employed; in all cases high product qualities with low residual solvent contents were observed

L31 ANSWER 10 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:614315 HCAPLUS Full-text  
DOCUMENT NUMBER: 107:214315  
TITLE: Nuclear peptides from calf liver: large scale isolation and fractionation; control of gene expression in cell-free systems, and inhibition of growth of cells in culture  
AUTHOR(S): Hillar, M.; Santarelli, I.; Stolzmann, Z.; Wafeeg, W.; Allen, S.; Chan, J. Y. H.; Patt, L. M.; Houck, J. C.; Wyborny, L. E.  
CORPORATE SOURCE: Dep. Biol., Texas Southern Univ., Houston, TX, 77004, USA  
SOURCE: Basic and Applied Histochemistry (1987), 31(3), 299-313  
CODEN: BAHID7; ISSN: 0391-7258  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB DNA and nuclear RNA fractions contain small peptides (mol. weight 600-1500) attached noncovalently. A large-scale isolation procedure was developed for the extraction of such peptides (deprimerones) directly from the lysed nuclei. Further purification and fractionation were performed by chromatog. on Sephadex, silica gel, and HPLC C18 reversed-phase columns. HPLC fractionation yielded 11 peaks. The peptides are rich in serine, glycine, alanine, and acidic amino acids. They do not contain S-containing amino acids. Only occasionally tyrosine, phenylalanine, histidine, arginine, and a very moderate amount of lysine are found. These peptides are active in inhibiting gene expression in cell-free systems and incorporation of labeled thymidine in L 1210 murine leukemic cell culture. Thorough and exhaustive anal. demonstrated that the isolated peptides are not degradative products of histone or nonhistone chromosomal proteins.

L31 ANSWER 11 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1987:98251 HCAPLUS Full-text  
DOCUMENT NUMBER: 106:98251  
TITLE: Low molecular weight peptides bound to nucleic acids: isolation, structure and effects on gene expression  
AUTHOR(S): Santarelli, I.; Hillar, M.; Stolzmann, Z.; Chan, J. Y. H.; Patt, L. M.; Houck, J. C.



CORPORATE SOURCE: Univ. Camerino, Camerino, 62032, Italy  
SOURCE: Serono Symposia Publications from Raven Press (1986),  
34(Biol. Regul. Cell Proliferation), 35-8  
CODEN: SPRPDU; ISSN: 0733-897X

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The large-scale isolation and fractionation of deprimerones, low-mol.-weight (600-1500-dalton) peptides bound to nucleic acid, from calf liver nuclear and polysomal RNA fractions are reported. Standard methods were used. One of the polysomal deprimerones was purified to homogeneity and its amino acid sequence was determined. The effect of deprimerones on replication is mediated via DNA polymerase  $\beta$  activity.

L31 ANSWER 12 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:83890 HCAPLUS Full-text

DOCUMENT NUMBER: 104:83890

TITLE: Nuclear peptides from calf liver: large scale isolation and fractionation; control of gene expression in cell-free systems, and inhibition of growth of cells in culture

AUTHOR(S): Hillar, Marian; Santerelli, Ivano; Stolzmann, Zdzislaw; Wafeeg, Warren; Allen, Sharon; Chan, John Y. H.; Patt, Leonard M.; Houck, John C.; Wyborny, Leigh E.

CORPORATE SOURCE: Dep. Biol., Texas South. Univ., Houston, TX, 77004, USA

SOURCE: Physiological Chemistry and Physics and Medical NMR (1985), 17(3), 325-43  
CODEN: PCPNER; ISSN: 0748-6642

DOCUMENT TYPE: Journal

LANGUAGE: English

AB DNA and nuclear RNA fractions contain small peptides (deprimerones) (600-1500 daltons) attached noncovalently. A large-scale isolation procedure was developed for the extraction of such peptides directly from the lysed nuclei. Further purification and fractionation was performed by chromatog. on Sephadex, silica gel, and HPLC C18-reverse phase columns. HPLC fractionation yielded 11 peaks. The peptides are rich in serine, glycine, alanine, and acidic amino acids. They do not contain S-containing amino acids. Only occasionally tyrosine, phenalalanine, histidine, arginine, and very moderate amts. of lysine are found. These peptides are active in inhibiting gene expression in cell-free systems and incorporation of labeled thymidine into L 1210 murine leukemic cell culture. Thorough and exhaustive anal. demonstrated that the isolated peptides are not degradative products of histone or nonhistone chromosomal proteins.

L31 ANSWER 13 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:83889 HCAPLUS Full-text

DOCUMENT NUMBER: 104:83889

TITLE: Small peptides bound to polysomal RNA inhibit gene expression in cell-free systems, replication of stimulated lymphocytes and DNA repair in isolated chromatin

AUTHOR(S): Hillar, Marian; Stolzmann, Zdzislaw; Santarelli, Ivano; Patt, Leonard M.; Houck, John C.; Chan, John Y. H.; Wyborny, Leigh E.

CORPORATE SOURCE: Dep. Biol., Texas South. Univ., Houston, TX, 77004,

SOURCE: USA  
Physiological Chemistry and Physics and Medical NMR  
(1985), 17(3), 307-23  
CODEN: PCPNER; ISSN: 0748-6642  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Polysomal poly(A)+-RNA prepared from isolated calf liver polysomes by deproteinization and affinity chromatog. on oligo(dT)-Sephadex at pH 6 contains low-mol.-weight peptides (600-1500 daltons) bound noncovalently. These peptides were extracted from the poly(A)+-RNA-peptides complex by precipitation of the nucleic acids with 80% EtOH at alkaline pH (9.5) and purified on Sephadex G-25 and G-15 columns. Further fractionation was performed by silica gel chromatog. and HPLC. The amino acid composition of the isolated peptidic fraction was compared with similar peptides obtained from rat liver, rabbit reticulocyte, and calf thymus polysomes. Effluent (ribosomal) RNA contains only a negligible amount of peptides. Isolated polysomal RNA peptides, named deprimerones, have a general depressing effect on gene expression in vitro (Hillar, M.; Przyjemski, J., 1979). Isolated deprimerones not only inhibit DNA transcription and RNA translation in reconstituted cell-free systems, but also DNA replication by DNA polymerase  $\beta$  with single- and double-stranded DNA template and synthetic deoxyribonucleotide polymers. The inhibitory effect on replication was correlated with the inhibition of [3H]deoxyribonucleotide incorporation into isolated chromatin and in stimulated lymphocyte cell cultures. The isolated deprimerones are characterized by similar amino acid compns. in various species.

L31 ANSWER 14 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1985:55799 HCAPLUS Full-text  
DOCUMENT NUMBER: 102:55799  
TITLE: Opposing effects of the polycation hexadimethrine (polybrene) on normal and leukemic lymphocytes  
AUTHOR(S): Patt, Leonard M.; Houck, John C.  
CORPORATE SOURCE: Immunogenics Corp., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1985), 30(2), 109-14  
CODEN: PHMGBN; ISSN: 0031-7012  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The polycationic compound hexadimethrine bromide [28728-55-4] had opposing effects on normal and leukemic murine lymphocytes. This polycation stimulated the DNA-synthetic response of murine spleen cells to alloantigens, whereas, at the same concentration, proliferation of the leukemic cell line, L1210, was inhibited. Other polycations tested did not show this effect. The hexadimethrine had no significant effect on the rejection rate of histo-incompatible skin grafts in mice. Low concns. inhibited the growth of the L1210 leukemia cells in DBA/2J mice.

L31 ANSWER 15 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1984:622212 HCAPLUS Full-text  
DOCUMENT NUMBER: 101:222212  
TITLE: Opposing effects of the polycation hexadimethrine (polybrene) on normal and leukemic lymphocytes  
AUTHOR(S): Patt, Leonard M.; Houck, John C.  
CORPORATE SOURCE: Immunogenics Corp., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1985), 30(1), 55-60  
CODEN: PHMGBN; ISSN: 0031-7012

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The polycationic compound hexadimethrine Br [28728-55-4] has opposing effects on normal and leukemic murine lymphocytes. This polycation significantly stimulated the DNA-synthetic response of murine spleen cells to alloantigens, whereas, at the same concentration, proliferation of the leukemic cell line, L1210, was inhibited. Other polycations tested did not show this effect. The hexadimethrine had no significant effect on the rejection rate of histoincompatible skin grafts in mice. Low concns. did inhibit the growth of the L1210 leukemia cells in DBA/2J mice.

L31 ANSWER 16 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1984:405481 HCAPLUS Full-text  
 DOCUMENT NUMBER: 101:5481  
 TITLE: Immune stimulator  
 INVENTOR(S): Houck, John C.; Patt, Leonard M.  
 PATENT ASSIGNEE(S): Endorphin, Inc., USA  
 SOURCE: PCT Int. Appl., 49 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8401090	A1	19840329	WO 1983-US1439	19830916
W: AU, DK, FI, JP, NO				
RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
AU 8320798	A	19840404	AU 1983-20798	19830916
JP 59501786	T	19841025	JP 1983-503297	19830916
EP 122926	A1	19841031	EP 1983-903269	19830916
R: AT, BE, CH, DE, FR, GB, LI, LU, NL, SE				
DK 8402494	A	19840521	DK 1984-2494	19840521
FI 8402032	A	19840521	FI 1984-2032	19840521
NO 8402015	A	19840521	NO 1984-2015	19840521
US 4571336	A	19860218	US 1985-694899	19850125
PRIORITY APPLN. INFO.:			US 1982-419995	A 19820920
			US 1983-526356	A 19830825
			WO 1983-US1439	A 19830916

AB An immunostimulatory peptide is described which is isolated from bovine thymus tissue and can be used to treat mammals and birds subject to viral or fungus infections. Thus, bovine thymus was extracted with ammonium carbonate, pH 8.5, and after centrifugation the supernatant was lyophilized. The lyophilized powder is extracted with EtOH (50-60% final concentration), and the supernatant is treated with acetone. The material is purified by gel filtration on Sephadex and BioGel. The material during chromatog. seps. into 2 fractions, one with mol. weight .apprx.1400 daltons, the other of 100-1400 daltons. The factor specifically acts on reactions involving T-lymphocytes.

L31 ANSWER 17 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:447935 HCAPLUS Full-text  
 DOCUMENT NUMBER: 99:47935  
 TITLE: Role of polypeptide growth factors in normal and abnormal growth  
 AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, USA  
SOURCE: Kidney International (1983), 23(4), 603-10  
CODEN: KDYIA5; ISSN: 0085-2538  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review with 134 refs. is given on the influence of polypeptide growth factors on animal growth, including both the increase in number of cells (hyperplasia) and the enlargement and extension of individual cells (hypertrophy). The actions of growth factors are considered on normal growth and development, injury repair, and neoplastic growth.

L31 ANSWER 18 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1983:119342 HCAPLUS Full-text

DOCUMENT NUMBER: 98:119342

TITLE: Inhibition of normal and leukemic lymphocyte proliferation by compound 48/80

AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Biochemical Pharmacology (1983), 32(3), 565-7

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Compound 48/80 and other low mol. weight polycations were potent inhibitors of normal and leukemic lymphocyte proliferation. On a molar basis these polycations were as active as polylysine [25104-18-1] or hexadimethrine bromide [28728-55-4], polycations many times larger. It appears that certain low mol. weight polycations have a mol. shape or size which makes them more potent inhibitors of proliferation than their degree of cationic property would indicate. Low mol. weight polycations may provide a route to new antimitotic or immunosuppressive drugs.

L31 ANSWER 19 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1982:613611 HCAPLUS Full-text

DOCUMENT NUMBER: 97:213611

TITLE: Inhibition of lymphocyte DNA-synthetic responses by spermine-derived polycations

AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.;  
Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Biochemical Pharmacology (1982), 31(14), 2353-60

CODEN: BCPCA6; ISSN: 0006-2952

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Some spermine-derived polycations were chemical synthesized by reaction of spermine with glutaraldehyde followed by reduction of the resulting Schiff base with NaBH<sub>4</sub>. Their migration on ion-exchange and gel filtration columns was consistent with the formation of polycations with properties similar to those reported for the spontaneous reaction products. When added to cultures of alloantigen- or mitogen-stimulated lymphocytes, these polycations were potent inhibitors of the incorporation of [3H]thymidine and blast cell formation. This inhibition was reversible, noncytotoxic, and only apparent if the polycation was added early in the culture period. The concentration of polycation necessary to achieve 50% inhibition of the lymphocyte response decreased as the cationic nature relative to spermine increased.

L31 ANSWER 20 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1982:83786 HCAPLUS Full-text  
DOCUMENT NUMBER: 96:83786  
TITLE: Lymphocyte chalone: fact or artifact?  
AUTHOR(S): Houck, J. C.; Patt, L. M.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Lymphokines (1981), 4, 35-68  
CODEN: LMPKD9; ISSN: 0277-013X  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English  
AB A review with 97 refs.

L31 ANSWER 21 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1982:50564 HCAPLUS Full-text  
DOCUMENT NUMBER: 96:50564  
TITLE: Low molecular weight inhibitors of lymphocyte transformation. II. Biological specificity  
AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.;  
Houck, John C.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Pharmacology (1982), 24(2), 74-81  
CODEN: PHMGBN; ISSN: 0031-7012  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Exts. of calf thymus contain a number of inhibitors of lymphocyte transformation. A low mol. weight (600 daltons) anionic inhibitor of lymphocyte transformation was identified and separated from contaminating polyamines and nucleotides. The active fraction inhibited the DNA synthetic response of murine or human T cells to alloantigens in mixed lymphocyte culture and to T-cell-specific mitogens. It was inactive against stimulation of B lymphocytes and several cultured tumor cell lines.

L31 ANSWER 22 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1981:584717 HCAPLUS Full-text  
DOCUMENT NUMBER: 95:184717  
TITLE: Pulmonary polyamine permeability factor  
AUTHOR(S): Gleisner, John M.; Patt, Leonard M.;  
Ramthun, Carol A.; Houck, John C.  
CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA  
SOURCE: Inflammation (New York, NY, United States) (1981),  
5(2), 127-36  
CODEN: INFLD4; ISSN: 0360-3997  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Acid exts. of calf lung contain low-mol.-weight factors which increase the permeability of the microcirculation when injected into the skin of rats. These factors, which were present in very low levels in aqueous exts., were purified by gel filtration and ion-exchange chromatog. High-voltage paper electrophoresis revealed 2 active compds. with mobilities identical to the polyamines spermine and spermidine. Authentic samples of these compds. were as active in the blueing reaction as the isolated compds. The permeability activity of both the isolated factors and the synthetic compds. was inhibited by pepstatin and by pretreatment of the animals with pyrilamine maleate. If the normally low extracellular levels of these polyamines is increased by tissue damage, they could increase vascular permeability within the lung by releasing histamine from adjacent mast cells.

L31 ANSWER 23 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:546303 HCAPLUS Full-text

DOCUMENT NUMBER: 95:146303

TITLE: Abnormal behavior of polyamines on gel filtration: a cautionary note

AUTHOR(S): Patt, Leonard M.; Barrantes, Denny M.;

Gleisner, John M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: Cell Biology International Reports (1981), 5(8), 797-803

CODEN: CBRPDS; ISSN: 0309-1651

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The polyamines, spermine and spermidine, persist in various tissue exts. despite procedures such as dialysis and ultrafiltration which normally remove such low-mol.-weight compds. Polyamines in tissue exts. and the standard compds. alone can migrate as much higher mol. weight compds. on gel filtration on Sephadex G 25, G 10, and G 15, and Bio-Gel P 6 under a variety of conditions. Thus, even relatively pure fractions obtained from tissue exts. may be contaminated with, or consist entirely of, polyamines, which are potent inhibitors of cell proliferation under certain conditions.

L31 ANSWER 24 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:495304 HCAPLUS Full-text

DOCUMENT NUMBER: 95:95304

TITLE: Low molecular weight inhibitors of lymphocyte transformation

AUTHOR(S): Patt, Leonard M.; Gleisner, John M.;

Barrantes, Denny M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, USA

SOURCE: Pharmacology (1981), 23(3), 117-27

CODEN: PHMGBN; ISSN: 0031-7012

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A variety of factors isolated from bovine thymus inhibited the transformation of human and mouse lymphocytes. The majority of this activity fractionates as low mol. weight material by ultrafiltration or column chromatog. Three distinct fractions of low mol. weight were isolated. One fraction contains the spermine and spermidine. A 2nd fraction contains thymidine or thymidine-like nucleotides. The 3rd fraction appears to be polypeptide in nature, has an estimated mol. weight of 500-600, is heat and pH stable, and is easily extracted by solns. containing organic solvents. Preliminary steps in the isolation of this inhibitor are presented, and its relation to other immunosuppressive and anti-mitotic agents is discussed.

L31 ANSWER 25 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:478160 HCAPLUS Full-text

DOCUMENT NUMBER: 95:78160

TITLE: Biosynthesis of glycolipids in normal NRK line cells and those cells transformed by oncornavirus B77 and its temperature-sensitive mutants LA 25 and LA 31

AUTHOR(S): Baglei, E. A.; Hakomori, S. I.; Patt, L.;

Fogt, P. N.

CORPORATE SOURCE: Inst. Probl. Onkol., Kiev, USSR

SOURCE: Virusy Raka Leikoza (1979), 156-8. Editor(s):  
Zhdanov, V. M.; Tikhonenko, T. I. Akad. Med. Nauk  
SSSR, Inst. Virusol. im. D. I. Ivanovskogo: Moscow,  
USSR.  
CODEN: 45WQA9

DOCUMENT TYPE: Conference

LANGUAGE: Russian

AB Transformation of NRK cells by oncovirus B77 was accompanied by 1.9, 1.7, 6.6, and 6.0-fold decreases in  $\beta$ -galactosylceramide, hematoside, trihexosylceramide, and globoside biosynthesis, resp. Hematoside formation in cells infected with LA 25 virus at 32° (i.e. the temperature at which the transformed phenotype is expressed) was 2.2 and 3.0-fold lower than that observed in B77 and LA 31 virus-transformed cells, resp. Globoside formation in LA 25-transformed cells was 3.0-fold lower than in B77-transformed cells and 5.0-fold greater than in LA 31-transformed cells. At 39° (i.e. the temperature at which the normal phenotype is expressed), hematoside and globoside formation was increased in LA 25- and LA 31-infected cells when compared with B77-transformed cells.

L31 ANSWER 26 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1981:26169 HCAPLUS Full-text

DOCUMENT NUMBER: 94:26169

TITLE: The incredible shrinking chalone

AUTHOR(S): Patt, Leonard M.; Houck, John C.

CORPORATE SOURCE: Virginia Mason Res. Cent., Seattle, WA, 98101, USA

SOURCE: FEBS Letters (1980), 120(2), 163-70

CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 85 refs., of the chemical nature of chalone and problems in their purification. The much smaller mol. wts. of purified chalone compared with those previously determined with unpurified samples is demonstrated and shown to be caused by binding of other mols., especially polyamines, to the chalone. Data on lymphocyte and granulocyte chalone (mol. wts. approx. 600-700) are emphasized.

L31 ANSWER 27 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:616730 HCAPLUS Full-text

DOCUMENT NUMBER: 93:216730

TITLE: Glycosylation of viral envelope components

AUTHOR(S): Grimes, W. J.; Irwin, G. N.; Patt, L. M.

CORPORATE SOURCE: Dep. Biochem., Univ. Arizona, Tucson, AZ, USA

SOURCE: Cell Membr. Viral Envelopes (1980), Volume 2, 541-56.

Editor(s): Blough, H. A.; Tiffany, John Michael.

Academic: London, Engl.

CODEN: 44LMA3

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 84 refs. of cellular complex polysaccharide biosynthesis and viral glycosylation.

L31 ANSWER 28 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:510189 HCAPLUS Full-text

DOCUMENT NUMBER: 93:110189

TITLE: Notes on improved procedures for the chemical

modification and degradation of glycosphingolipids  
 AUTHOR(S): MacDonald, D. L.; Patt, L. M.; Hakomori, S.  
 CORPORATE SOURCE: Div. Biochem. Oncol., Fred Hutchinson Cancer Res.  
 Cent., Seattle, WA, 98104, USA  
 SOURCE: Journal of Lipid Research (1980), 21(5), 642-5  
 CODEN: JLPRAW; ISSN: 0022-2275  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Some simplified and efficient procedures are described for the chemical  
 modifications of glycosphingolipids. The olefinic bond of the ceramide moiety  
 of the acetylated glycolipid was quant. oxidized with OsO<sub>4</sub> and HIO<sub>4</sub>.  
 Treatment of the resulting glycolipid aldehyde with NaOMe resulted in the  
 release of the intact oligosaccharide. The yield of oligosaccharides under  
 the new condition was much higher than previously found. The olefinic bond  
 was also oxidized to a carboxyl function by either of 2 methods: (a) the  
 aldehyde group resulting from the above oxidation was further oxidized with  
 performic acid and (b) the olefinic bond of the fully acetylated glycolipid  
 was oxidized directly to the acid by KMnO<sub>4</sub> in Me<sub>2</sub>CO. The Me ester of the  
 carboxyl group of the sialic acid in gangliosides can be formed with  
 diazomethane in MeOH-ether after treatment of the gangliosides with Dowex-50  
 (H<sup>+</sup> form). Possible uses of these glycolipid modifications are discussed.

L31 ANSWER 29 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1980:405095 HCAPLUS Full-text  
 DOCUMENT NUMBER: 93:5095  
 TITLE: Cell biological and immunological significance of  
 ganglioside changes associated with transformation  
 AUTHOR(S): Hakomori, Senichiro; Young, William W., Jr.;  
 Patt, Leonard M.; Yoshino, Teruo; Halfpaw,  
 Laurel; Lingwood, Clifford A.  
 CORPORATE SOURCE: Fred Hutchinson Cancer Res. Cent., Univ. Washington,  
 Seattle, WA, 98104, USA  
 SOURCE: Advances in Experimental Medicine and Biology (1980),  
 125(Struct. Funct. Gangliosides), 247-61  
 CODEN: AEMBAP; ISSN: 0065-2598  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 AB A review with 26 refs. of ganglioside alterations in oncogenic transformation.

L31 ANSWER 30 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1978:573414 HCAPLUS Full-text  
 DOCUMENT NUMBER: 89:173414  
 TITLE: Retinol induces density-dependent growth inhibition  
 and changes in glycolipids and LETS  
 AUTHOR(S): Patt, Leonard M.; Itaya, Koichi; Hakomori,  
 Senitiroh  
 CORPORATE SOURCE: Dep. Biochem. Oncol., Fred Hutchinson Cancer Res.  
 Cent., Seattle, WA, USA  
 SOURCE: Nature (London, United Kingdom) (1978), 273(5661),  
 379-81  
 CODEN: NATUAS; ISSN: 0028-0836  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Culturing hamster fibroblasts NIL or mouse 3T3 cells in medium containing  
 retinol [68-26-8] (20 nmol/mL) enhanced, whereas medium with UV-irradiated  
 serum reduced, contact orientation and cell-d. dependent inhibition of cell



growth. Associated changes of cell surface membrane GM3 level, stimulation of hematoside formation, ganglioside contact response, and in LETS were observed. The ability of vitamin A compds. to prevent carcinogenesis may be related to changes in surface membrane glycolipids and glycoproteins.

L31 ANSWER 31 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:197544 HCAPLUS Full-text

DOCUMENT NUMBER: 88:197544

TITLE: Interactions of nonionic surfactants with tyrothricin.  
Part 3: Localization of tyrothricin in the surfactant micelle

AUTHOR(S): Ullmann, E.; Thoma, K.; Patt, L.

CORPORATE SOURCE: Inst. Pharm. Lebensmittelschem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.

SOURCE: Tenside Detergents (1978), 15(1), 9-13

CODEN: TSDTAZ; ISSN: 0040-3490

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Detns. of the partition behavior of tyrothricin [1404-88-2] between H<sub>2</sub>O and micelles of several polyethylene glycol fatty acid esters and fatty alc. ethers, as well as studies of the effect of these nonionic surfactants on the UV absorption spectrum of tyrocidine, the principal component of tyrothricin, indicated that both the hydrophilic and the hydrophobic areas of the surfactants are involved in binding tyrothricin. The binding of tyrothricin (and therefore the capacity of the detergents to solubilize it) increases with increasing size of both the hydrophilic and hydrophobic components, although the influence of the hydrophilic component predominates. This explains the various degrees of inhibition of tyrothricin's antibiotic activity by different nonionic surfactants.

L31 ANSWER 32 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:141578 HCAPLUS Full-text

DOCUMENT NUMBER: 88:141578

TITLE: Interactions of nonionic surfactants with tyrothricin.  
Part II. Physicochemical properties of thyrothricin and the solubilizing capacity of surfactants

AUTHOR(S): Thoma, K.; Ullmann, E.; Patt, L.

CORPORATE SOURCE: Inst. Pharm. Lebensmittelchem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.

SOURCE: Tenside Detergents (1977), 14(6), 297-300

CODEN: TSDTAZ; ISSN: 0040-3490

DOCUMENT TYPE: Journal

LANGUAGE: German

AB The solubility of tyrothricin [1404-88-2] in water (74 mg %) is due primarily to the amphophilic character of its principal component, tyrocidine [19659-41-7], whereas the other component gramicidin [1405-97-6], is more lipophilic. Tyrocidine decreases the surface tension of water to a min. of 40.7 dynes/cm, and forms micelles in water with a critical micelle-forming concentration of  $2.6 \times 10^{-4}$ M. On the contrary, gramicidin has little effect on the surface tension and does not undergo association. Polyethylene glycol esters and ethers increase the water solubility of tyrothricin; the most effective is polyethylene glycol 400 lauryl ether [9002-92-0]. Antibacterial activity is lost in parallel with the increase in solubility.

L31 ANSWER 33 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:594742 HCAPLUS Full-text  
DOCUMENT NUMBER: 87:194742  
TITLE: Interactions of non-ionic surfactants with  
tyrothricin. I: Investigation on their effect on the  
antibiotic activity  
AUTHOR(S): Thoma, Karl; Ullmann, Elsa; Patt, L.  
CORPORATE SOURCE: Inst. Pharm. Lebensmittelchem., Univ. Muenchen,  
Munich, Fed. Rep. Ger.  
SOURCE: Tenside Detergents (1977), 14(5), 266-70  
CODEN: TSDTAZ; ISSN: 0040-3490  
DOCUMENT TYPE: Journal  
LANGUAGE: German

AB With the exception of polyethylene glycol 400 lauryl ether [9002-92-0] (1%), which was inhibitory, a series of polyethylene glycol fatty acid esters and ethers did not, when tested alone, affect the proliferation rate of *Staphylococcus aureus* in vitro. However, most of the compds. interfered with the antibacterial action of tyrothricin [1404-88-2]. In the series of polyethylene glycol 400-4700 stearates, the interference with tyrothricin's antibacterial activity decreased with increasing chain length of the polyethylene glycol component. In contrast, lengthening the fatty acid ester chain of polyethylene glycol 900 sorbitan fatty esters from laurate to stearate enhanced the tyrothricin-inhibitory action. Polyethylene glycol 400 lauryl ester [9004-81-3] and ether interfered only slightly with tyrothricin. Other data are given relative to the effect of the detergents' amphiphilic composition or tyrothricin activity, and the consequences of using such detergents as solubilizing adjuvants in tyrothricin-containing pharmaceutical prepns. are discussed.

L31 ANSWER 34 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1977:111134 HCAPLUS Full-text  
DOCUMENT NUMBER: 86:111134  
TITLE: Solvent residues in film-coated tablets and isolated  
film coatings.  
AUTHOR(S): Patt, L.; Hartmann, V.  
CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.  
SOURCE: Pharmazeutische Industrie (1976), 38(10), 902-6  
CODEN: PHINAN; ISSN: 0031-711X  
DOCUMENT TYPE: Journal  
LANGUAGE: German

AB The amts. of solvent residues measured gas chromatog. in placebo tablets coated with the gastric juice-resistant coating, HP-50 (hydroxypropylmethylcellulose phthalate) [9050-31-1], or water-soluble films of Ethocel N 10 (ethylcellulose) [9004-57-3], Methocel 60 HG (hydroxypropylmethylcellulose) [9004-65-3] and Kollidon 25 (polyvinylpyrrolidone) [9003-39-8] and in samples of isolated coating material depended on the solvent used and also on the coating apparatus, spraying technique, core porosity, and drying conditions. Solvent residues were minimized by drying first in the coating apparatus and then at room temperature at 30°, by using an apparatus with maximum air flow, and by using a low porosity core. EtOH [64-17-5], Me<sub>2</sub>CO [67-64-1], MeOH [67-56-1], and CH<sub>2</sub>Cl<sub>2</sub> [75-09-2] left smaller residues than iso-PrOH [67-63-0].

L31 ANSWER 35 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:520369 HCAPLUS Full-text  
DOCUMENT NUMBER: 85:120369  
TITLE: Formation of mannosyl-lipids by an

ectomannosyltransferase in suspensions of BALB/c fibroblasts

AUTHOR(S): Patt, Leonard M.; Grimes, William J.  
CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
SOURCE: Biochimica et Biophysica Acta, General Subjects  
(1976), 444(1), 97-107  
CODEN: BBGSB3; ISSN: 0304-4165

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A mannosyltransferase was detected in suspensions of BALB/c fibroblasts incubated with GDP-mannose-14C. Exptl. evidence indicated the cell surface as the most likely site for the enzyme. The transferase synthesizes both glycolipids and glycoproteins. The lipid compds. have properties suggestive of lipid-linked mono- and oligosaccharides which can function as intermediates in glycoprotein synthesis. The formation of these compds. by a cell surface enzyme suggested that lipid-linked intermediates may play an important role in the glycosylation of membrane components.

L31 ANSWER 36 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:505792 HCAPLUS Full-text

DOCUMENT NUMBER: 85:105792

TITLE: The ectoglycosyltransferases of cultured animal cells

AUTHOR(S): Patt, Leonard M.

CORPORATE SOURCE: Univ. Arizona, Tucson, AZ, USA

SOURCE: (1976) 155 pp. Avail.: Xerox Univ. Microfilms, Ann Arbor, Mich., Order No. 76-16,232  
From: Diss. Abstr. Int. B 1976, 37(1), 201-2

DOCUMENT TYPE: Dissertation

LANGUAGE: English

AB Unavailable

L31 ANSWER 37 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:119692 HCAPLUS Full-text

DOCUMENT NUMBER: 84:119692

TITLE: Ectogalactosyltransferase studies in fibroblasts and concanavalin A-stimulated lymphocytes

AUTHOR(S): Patt, Leonard M.; Endres, Robert O.; Lucas, David O.; Grimes, William J.

CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA

SOURCE: Journal of Cell Biology (1976), 68(3), 799-802  
CODEN: JCLBA3; ISSN: 0021-9525

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Suspensions of concanavalin A-stimulated mouse spleen cells incorporated label from exogenous UDP-galactose-14C. No ectogalactosyltransferases were present. The spleen cells degraded the nucleotide sugar, releasing galactose which was used for complex carbohydrate synthesis within the cell. BALB/c 3T3 cells and SV40-transformed 3T3 cells in suspension showed an ectogalactosyltransferase capable of transferring the carbohydrate moiety of UDP-galactose to endogenous acceptor mols.

L31 ANSWER 38 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1976:15065 HCAPLUS Full-text

DOCUMENT NUMBER: 84:15065

TITLE: Ectoglycosyltransferase activity in suspensions and

monolayers of cultured fibroblasts  
AUTHOR(S): Patt, Leonard M.; Grimes, William J.  
CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA  
SOURCE: Biochemical and Biophysical Research Communications  
(1975), 67(1), 483-90  
CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fibroblasts suspended by a brief exposure to EDTA had the ability to transfer the carbohydrate moiety of exogenous nucleotide-sugars to endogenous acceptors (ectoglycosyltransferase activity). Monolayers of the same cells did not have this ability. Both suspensions and monolayers could transfer carbohydrate to exogenous glucose acceptors. The cells could glycosylate exogenous desialized,  $\beta$ -galactosidase treated fetuin, utilizing either UDP-galactose-14C a direct donor or galactose-3H as a precursor to a glucose donor.

L31 ANSWER 39 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:96279 HCAPLUS Full-text

DOCUMENT NUMBER: 82:96279

TITLE: Comparison of glycosyltransferase activities and malignant properties in normal and transformed cells derived from BALB/c mice

AUTHOR(S): Patt, Leonard M.; Van Nest, Gary A.; Grimes, William J.

CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA

SOURCE: Cancer Research (1975), 35(2), 438-41

CODEN: CNREA8; ISSN: 0008-5472

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The ability of suspensions of BALB/c cells to catalyze the incorporation of nucleotide sugars into complex polysaccharides was compared. These cells had previously been characterized for concanavalin A-induced agglutinability, tumorigenicity, and malignancy. All of the cell lines tested catalyzed transfer of the sugar moieties of CMP-N-acetylneuraminic acid, galactose, UDP-N-acetylgalactosamine, UDP-N-acetylglucosamine, UDP-glucose, and GDP-mannose to glycoproteins and glycolipids. While some transformed lines exhibited alterations in transferase levels, others could not be distinguished from normal cells. Normal cells, transformed cells that caused tumors that regressed, and transformed cells that caused tumors that killed an immunol. competent host showed growth-dependent changes in transferase activities. Determining the ability to catalyze carbohydrate transfer is insufficient for predicting the tumorigenic and malignant properties of a cell line.

L31 ANSWER 40 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:502766 HCAPLUS Full-text

DOCUMENT NUMBER: 81:102766

TITLE: Cell surface glycolipid and glycoprotein glycosyltransferases of normal and transformed cells

AUTHOR(S): Patt, Leonard M.; Grimes, William J.

CORPORATE SOURCE: Coll. Med., Univ. Arizona, Tucson, AZ, USA

SOURCE: Journal of Biological Chemistry (1974), 249(13), 4157-65

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Normal and transformed mouse fibroblasts catalyzed transfer of sialic acid, galactose, N-acetylgalactosamine, N-acetylglucosamine, glucose, and mannose from nucleotide sugar donors to glycolipids and glycoproteins. The enzyme activity was associated with intact cells. Kinetic parameters and optimal ion concns. were determined for the glycosyltransferase activities detected when whole cells were incubated with nucleotide sugar. Homogenization of cells either decreased or did not change the activity observed. Adding unlabeled sugars did not affect incorporations. Trypsin caused a 50% inhibition of observable activity only when present in concns. which also caused significant cell destruction. Swiss SV40 transformed cells showed decreased sialic acid-transferring ability compared to the parent cell line. Swiss Py3T3 and SV3T3 cells had reduced ability to catalyze transfer of N-acetylgalactosamine to glycolipids compared with the normal cell line. Since these alterations have also been reported in homogenates of these cells, and in view of the large number of glycosyltransferase activities observed, the in vitro whole cell reactions probably detect the normal cellular systems which are in the process of synthesizing glycoproteins and glycolipids. Evidence supporting this conclusion was obtained from expts. in which glycolipid products synthesized in cells incubated in the presence of galactose-3H and UDP-galactose-14C were compared.

L31 ANSWER 41 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:124708 HCAPLUS Full-text  
 DOCUMENT NUMBER: 80:124708  
 TITLE: Optimizing film-coating systems using contact angle measurements  
 AUTHOR(S): Ehrhardt, Lothar; Patt, L.; Schindler, E.  
 CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.  
 SOURCE: Pharmazeutische Industrie (1973), 35(11), 719-22  
 CODEN: PHINAN; ISSN: 0031-711X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German

AB Expts. were conducted to optimize film coating systems on various tablet surfaces. The influence of film formers, solvents, pigment concentration, and tablet porosity were investigated as well as the correlation between the contact angle and the roughness of the film. The measurement of contact angles on tablet surfaces offers good facilities for selecting appropriate film coating systems and correlation is given between the contact angle and the quality of the resulting film-surfaces on the tablets.

L31 ANSWER 42 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:101960 HCAPLUS Full-text  
 DOCUMENT NUMBER: 78:101960  
 TITLE: Comparative studies of enzyme activities of some pancreatin preparations  
 AUTHOR(S): Ehrhardt, L.; Hartmann, V.; Patt, L.  
 CORPORATE SOURCE: Sandoz A.-G., Nuernberg, Fed. Rep. Ger.  
 SOURCE: Deutsche Apotheker Zeitung (1972), 112(50), 2005-9  
 CODEN: DAZE2; ISSN: 0011-9857  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German

AB A comparative investigation of 8 different pancreatin preps. with respect to their onset of action their resistance to gastric juice, their disintegration time, their release rate, and their digestive activity was conducted. Three of the 8 preps. were film-coated. In these preps. no visible change could be determined during incubation in artificial gastric juice. Two other

prepn. were also film-coated, but the film became permeable to gastric juice. The remaining 3 prepn. were softened and partially dissolved, resp. The release rates during the first hr of the experiment were low in 7 prepn. After this time the release rates of lipase activity increased markedly. The digestive activity was calculated from lipase release rate, which was low except in 1 preparation during the first hr and increased later. The results obtained with these in vitro expts. were confirmed by expts. performed in vivo.

L31 ANSWER 43 OF 43 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1942:34347 HCAPLUS  
DOCUMENT NUMBER: 36:34347  
ORIGINAL REFERENCE NO.: 36:5350d  
TITLE: Segmental abrasive wheel for pulp grinding  
INVENTOR(S): Patt, Leon A.  
PATENT ASSIGNEE(S): The Carborundum Co.  
DOCUMENT TYPE: Patent  
LANGUAGE: Unavailable  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2279486		19420414	US 1939-309217	19391214
AB		Various structural, mech. and operative details of an apparatus for preparing wood pulp.		

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